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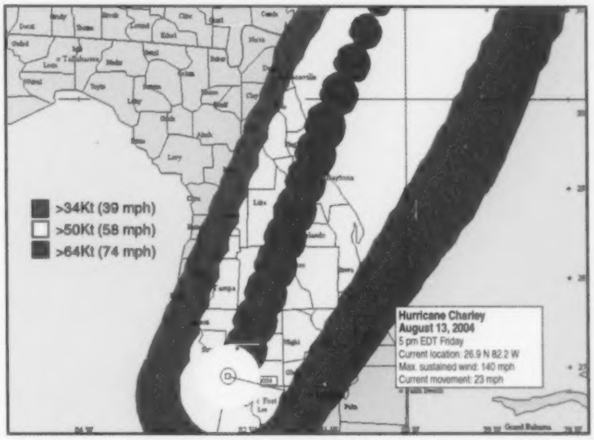
Preliminary Medical Examiner Reports of Mortality Associated with Hurricane Charley — Florida, 2004

On August 13, 2004, at approximately 3:45 p.m. EDT, Hurricane Charley made landfall at Cayo Costa, a Gulf of Mexico barrier island west of Cape Coral, Florida, as a Category 4 storm, with sustained winds estimated at 145 mph (*1*). Charley was the strongest hurricane to make landfall in the United States since Hurricane Andrew in August 1992 (*2*). Charley created a 7-foot storm surge in Fort Myers, then traversed the state in 9 hours, continuing in a northeast direction across eight counties (Figure). This report presents preliminary data from Florida medical examiners (MEs), which indicated that 31 deaths were associated with Hurricane Charley. Deaths might be reduced through coordinated hurricane planning, focused evacuations, and advance communication to the public regarding the environmental hazards after a natural disaster.

Under Florida law, all deaths related to hurricanes are reportable to MEs. A directly related death was defined as death caused by the environmental force of the hurricane. An indirectly related death was a death occurring under circumstances caused by the hurricane. Natural causes of death were considered storm related if physical stress during or after the storm resulted in exacerbation of preexisting medical conditions and death. As of September 1, a total of 31 deaths had been reported; 12 (39%) occurred on the first day of the storm, and eight (26%) additional deaths occurred during the next 2 days (Table).

Decedents ranged in age from 6 to 87 years (mean: 54 years; median: 56 years); 24 (77%) were male. Of the 31 deaths, 24 (77%) were classified as unintentional injury, six (19%) were attributable to natural causes, and one death was a suicide. Of the 24 unintentional deaths, 17 (71%) were trauma related, three were caused by carbon monoxide (CO) poisoning, and one each were caused by electrocution and drowning; two deaths involved at least two factors in combination (i.e., trauma and electrocution or CO poisoning and burn).

FIGURE. Projected northeasterly wind swath of Hurricane Charley shortly after landfall — Florida, August 13, 2004



Source: National Hurricane Center

INSIDE

837 Rapid Assessment of the Needs and Health Status of Older Adults After Hurricane Charley — Charlotte, DeSoto, and Hardee Counties, Florida, August 27–31, 2004
840 Rapid Community Health and Needs Assessments After Hurricanes Isabel and Charley — North Carolina, 2003–2004
842 Transfusion-Associated Transmission of West Nile Virus — Arizona, 2004
844 Participation in High School Physical Education — United States, 1991–2003
847 Use of Vitamins Containing Folic Acid Among Women of Childbearing Age — United States, 2004
850 West Nile Virus Activity — United States, September 8–14, 2004
851 Notice to Readers

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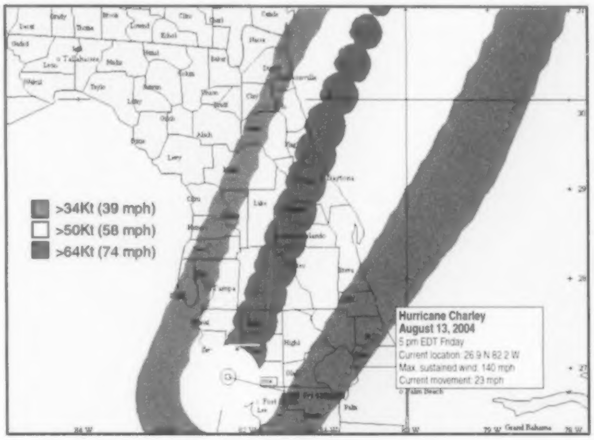

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Of the 18 deaths related to trauma and drowning, 11 (62%) occurred on the day the storm made landfall. Of those 11 deaths, nine were directly related to the storm, and two were indirectly related (i.e., an automobile crash in which a traffic light was out and a fall by an evacuee in a hotel room). Four trauma deaths resulted from motor-vehicle crashes, four from falls, three from implosion of a shelter (i.e., mobile home or shed), two from falling trees, two from flying debris, one from an uncertain cause, and one from a crush injury.

Of the six deaths related to natural causes, four resulted from exacerbation of cardiac conditions and two from exacerbation of preexisting pulmonary conditions. Two persons lost power during the storm and did not have access to their needed oxygen. One man likely had a heart attack during cleanup. Three men died of heart failure, one during the storm and two in the days after the storm. Of these three deaths, two were associated with exposure to extreme heat. The suicide death involved a man who became despondent after losing his home and possessions to Hurricane Charley; his death resulted from a witnessed self-inflicted gunshot wound to the head.

Reported by: *KT Jones, Office of Vital Statistics, Jacksonville; M Grigg, Office of Planning, Evaluation & Data Analysis; LK Crockett, MD, Div of Disease Control; L Conti, DVM, Div of Environmental Health; C Blackmore, DVM, Bur of Community Environmental Health; D Ward, A Rowan, DrPH, R Sanderson, MPH, M Laidler, MPH, J Hamilton, MPH, Bur of Epidemiology, Florida Dept of Health. J Schulte, DO, Epidemiology Program Office; D Batts-Osborne, MD, National Center for Environmental Health; D Chertow, MD, EIS Officer, CDC.*

Editorial Note: Preliminary findings from examining the 31 deaths associated with Hurricane Charley in Florida revealed that hurricane wind effects rather than flooding or rain led to the majority of deaths. The majority of fatalities involved blunt trauma caused by injuries from falling trees, flying debris, and destroyed physical structures. Similar to Hurricane Andrew, which devastated sections of Florida in 1992, only one death was caused by drowning (*2*). The mortality and morbidity associated with hurricanes can vary according to particular characteristics of a storm. Strong winds instead of a huge storm surge with subsequent flooding occurred with Hurricane Charley.

Advance hurricane warnings, practiced disaster plans, and coordinated evacuation procedures are crucial to limiting the adverse effects of severe weather-related events. Although forecasting systems have improved, the predicted storm paths might still change with short notice. Surrounding counties outside of the predicted path should be prepared to coordinate evacuation of residents, especially of vulnerable populations such as older adults, in a timely manner. Regional planning should include instruction on the importance of evacuation, especially

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TABLE. Number of deaths associated with Hurricane Charley, by date and cause — Florida, 2004

	August										September		
Cause of death	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**23**	**24**	**27**	**1**	**Total**	**Percentage of total**
Trauma	10	1	1			1			2	1	1	17	55
Carbon monoxide poisoning		1	2									3	10
Drowning	1											1	3
Electrocution		1										1	3
Suicide							1					1	3
Exacerbation of medical condition	1	1	1	1	2							6	19
Two or more causes							1	1				2	7
Total	**12**	**4**	**4**	**1**	**2**	**1**	**2**	**1**	**2**	**1**	**1**	**31**	**100**
Percentage of total	39	13	13	3	6	3	6	3	6	3	3	100	

of less stable structures such as mobile homes and tool sheds. In addition, the risk of operating a motor vehicle during and immediately after a hurricane should be emphasized.

The findings in this report are subject to at least one limitation. A standardized, universally accepted definition of hurricane-related death does not exist, so characterization of mortality caused by natural disasters such as hurricanes often is based on ME classification. In this case, deaths were classified as unintentional injury, intentional (e.g., suicide), or natural.

Local disaster plans and public health messages that address populations with special needs (e.g., older adults) should be strengthened. In this case, approximately 42% (13 of 31) of the decedents were persons aged >60 years. Older adults are more likely to have preexisting medical conditions (e.g., cardiac and respiratory problems) and are more likely to require medical supplies or equipment that depend on electricity to operate. All of the natural causes of death could be attributed to exacerbation of chronic medical conditions or to the lack of electricity, leading to extreme heat exposure or interruption of supplemental oxygen supply. The Florida Department of Health, with assistance from CDC, also conducted rapid assessments of needs of the older adult population in affected counties (*3*).

CO poisoning from improperly located generators, electrical injuries from downed power lines, and injuries incurred during cleanup activities can occur in the aftermath of disasters. Crisis intervention for persons who experience loss of family, friends, neighbors, pets, and property is critical. Public health messages should emphasize safety precautions and should be delivered in advance of the storm, before vital services and lines of communication are interrupted.

References

1. Florida State Emergency Response Team. Situation reports, Hurricane Charley, 2004. Tallahassee, Florida: Florida Division of Emergency Management, 2004.
2. CDC. Preliminary report: medical examiner reports of deaths associated with Hurricane Andrew—Florida, August 1992. MMWR 1992;41:641–4.
3. CDC. Rapid assessment of the needs and health status of older adults after Hurricane Charley—Charlotte, DeSoto, and Hardee counties, Florida, August 27–31, 2004. MMWR 2004;53:837–40.

Rapid Assessment of the Needs and Health Status of Older Adults After Hurricane Charley — Charlotte, DeSoto, and Hardee Counties, Florida, August 27–31, 2004

On August 13, 2004, Hurricane Charley, a Category 4 storm with sustained winds of 145 mph, made landfall at a Gulf of Mexico barrier island in Florida, resulting in an estimated 31 deaths statewide and extensive property damage in Charlotte, DeSoto, and Hardee counties. The Florida Department of Health (FLDOH) requested that CDC conduct a rapid needs assessment of older adults (i.e., aged ≥60 years) because this vulnerable age group constitutes a substantial proportion of the population in the most severely affected counties (Charlotte County [43% older adult residents of 141,627 total population], DeSoto County [24% of 32,209], and Hardee County [18% of 36,938]) (*1*). This report summarizes the findings and recommendations from three rapid needs assessments in these Florida counties. Older adult residents experienced disruptions in both quality-of-life status and medical care for preexisting conditions (e.g., cardiovascular disease, diabetes, and physical disabilities). On the basis of these findings, recommendations were provided to FLDOH for immediate use in deploying resources for response to Hurricane Charley and in planning responses to future disasters.

The objectives of the assessment were to 1) characterize post-hurricane living conditions, 2) identify and evaluate immediate needs (e.g., access to basic services and health care), 3) provide recommendations for managing emergency response and recovery, and 4) provide expertise on disaster response and training on rapid needs assessment. Separate assessments were conducted in each county because Charlotte, DeSoto, and Hardee counties differ in population size, demographics, and socioeconomic status. Census blocks within each county were grouped into clusters of five and weighted by the num-

ber of housing units with an older adult resident (*1*). By using probability proportionate to housing units with an older adult resident, 30 clusters and several replacement clusters were selected without replacement in each county. The clusters were representative of 38,301 (Charlotte), 4,909 (DeSoto), and 3,134 (Hardee) housing units with an older adult resident.

Street maps of census blocks were printed and provided to 10 assessment teams. Teams consisted of volunteers (e.g., nurses and epidemiologists) from county health departments and FLDOH and CDC personnel. Teams began in the central area of each assigned cluster, chose a random direction in which to proceed, moved sequentially along roadways to identify individual housing units, and attempted to conduct an interview with a household representative at seven homes with an older adult resident in each cluster. Survey teams conducted interviews in Charlotte County on August 27, in DeSoto County on August 28, and in Hardee County during August 29–31.

Assessment teams administered a questionnaire to household respondents about 1) dwelling type and structural damage; 2) utilities and services (e.g., water, electricity, telephone, garbage, and transportation); 3) injuries and illnesses incurred since the hurricane; 4) the impact of the hurricane on home health-care services (e.g., meal service, dressing changes, and delivery of supplies such as oxygen) and social support networks (e.g., group memberships, church activities, and regular social activities); 5) access to food and finances for immediate needs; and 6) the use of disaster-relief services. Household respondents also were asked about whether any older adult household members had preexisting disabilities, impairments, or health conditions and whether the hurricane exacerbated these conditions or prevented receipt of routine care. EpiInfo 2002 was used for data entry, and weighted cluster analysis was conducted by using SAS and SUDAAN.

For immediate needs pertaining to public health and medical issues and general assistance (e.g., roof repair and yard cleanup), interviewers completed referral forms and forwarded them to local emergency management agencies or the Sarasota Health Recovery Team Operations Center (SHRTOC) for appropriate response.

Assessment teams obtained information from 198, 192, and 205 households in Charlotte, DeSoto, and Hardee counties, respectively (Table). Preliminary findings follow.

Charlotte County. Nearly 93% of households reported hurricane-related damage. Approximately 90% of households were in compliance with a public health advisory for drinking bottled water. One third of households reported a disruption in social support networks. Among households having at least one older adult household member with a preexisting medical condition, one third reported that at least one older adult's medical condition worsened because of the hurricane, and 28% of households reported that at least one older adult was prevented from receiving routine care for a preexisting condition.

DeSoto County. Nearly 48% of households surveyed were in mobile homes, and 19% of all households reported uninhabitable homes. Approximately 54% of households were still awaiting restoration of sanitation services at the time of the survey. Bottled (81%) and well (17%) water were the most common drinking water sources.

Hardee County. Nearly 45% of households with an older adult resident were in single-family homes, and 53% were in mobile homes. The majority of households surveyed (80%) were in damaged but habitable homes; 12% were in damaged and uninhabitable homes. Electricity and water had been restored to the majority of households (94%) at the time of the survey. Bottled (66%), well (20%), and public (14%) water were the most common sources of drinking water. Nine percent of households reported at least one older adult who did not have access to prescription medications.

Reported by: *B Little, MPH, Sarasota County Health Dept, Sarasota; J Gill, PhD, Florida Dept of Health. J Schulte, DO, Epidemiology Program Office; S Young, MPH, J Horton, MS, L Harris, MPH, D Batts-Osborne, MD, C Sanchez, MD, J Malilay, PhD, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; T Bayleyegn, MD, EIS Officer, CDC.*

Editorial Note: Preliminary results of the assessments identified the needs and effects of the hurricane on preexisting medical conditions and health care for households with an older adult resident in the three counties. These preliminary findings suggest that local health-care providers and public health agencies should 1) accelerate restoration of medical-care services, including improving access to prescription medications; 2) improve sanitation services (i.e., garbage and storm-debris pickup); 3) improve awareness of public health advisories concerning use of bottled water for drinking and cooking until local sources (e.g., well water and public supplies) are determined to be safe; and 4) encourage reconnecting to social networks that offer support during the post-hurricane recovery period.

The findings in this report are subject to at least three limitations. First, logistic difficulties prevented interviewers from reaching certain areas targeted for the assessment. Some clusters were inaccessible because of muddy, impassable roads, and locally available maps did not have the level of detail necessary to navigate to all clusters mapped by using the 2000 U.S. Census. In these instances, replacement clusters were substituted. Second, although probability-based cluster selection increased the likelihood of survey teams encountering households with a resident aged ≥60 years, it did not guarantee that seven interviews could be completed in each cluster. As a result,

TABLE. Percentage of households with at least one person aged ≥60 years reporting changes in status after Hurricane Charley, by selected characteristics — Charlotte, DeSoto, and Hardee counties, Florida, August 27–31, 2004

	Charlotte County				DeSoto County				Hardee County			
Characteristic	% of households (n = 198)	(95% CI*)	No. of households projected†	(95% CI)	% of households (n = 192)	(95% CI)	No. of households projected	(95% CI)	% of households (n = 205)	(95% CI)	No. of households projected	(95% CI)
Damage to home												
Minimal or no damage	7	(3–12)	2,742	(993–4,490)	4	(0–9)	211	(0–428)	8	(3–13)	260	(105–415)
Damaged, habitable	82	(74–89)	31,231	(28,527–33,935)	77	(68–86)	3787	(3,346–4229)	79	(72–87)	2,490	(2,247–2,733)
Damaged, uninhabitable	11	(6–17)	4,328	(2,147–6,508)	19	(10–27)	911	(515–1,306)	12	(6–18)	384	(192–575)
Household structure type												
Mobile home	3	—	1,061	—	48	(39–58)	2,375	(1,903–2,847)	45	(37–54)	1,425	(1,152–1,697)
Single-family house	94	(92–96)	36,116	(35,400–36,832)	49	(38–59)	2,381	(1,890–2,872)	53	(45–62)	1,668	(1,398–1,937)
2–5 Family unit	3	(1–5)	1,124	(408–1,840)	3	(0–7)	153	(0–322)	1	(0–2)	42	(11–72)
Household utilities												
No running water	12	(7–18)	4,772	(2,748–6,795)	18	(10–25)	870	(507–1,233)	6	(3–10)	200	(81–318)
No electricity	19	(14–25)	7,363	(5,217–9,508)	18	(11–24)	866	(554–1,177)	6	(2–10)	191	(75–307)
No functioning indoor toilet	11	(6–16)	4,194	(2,238–6,149)	16	(7–24)	781	(367–1,194)	10	(5–15)	307	(149–466)
No working telephone	18	(11–25)	6,928	(4,135–9,721)	14	(7–20)	667	(354–981)	7	(3–11)	207	(82–332)
No regular garbage pickup	24	(18–30)	9,316	(6,981–11,651)	55	(47–64)	2,724	(2,327–3,121)	6	(2–9)	177	(66–287)
No access to transportation	3	(0–7)	1,300	(0–2,746)	2	(0–3)	84	(0–170)	11	(5–17)	340	(153–526)
No radio	12	(6–18)	4,646	(2,368–6,925)	9	(4–15)	447	(177–716)	12	(6–19)	389	(188–591)
Food and water												
Using well water	0	(0–1)	191	(0–429)	17	(10–24)	826	(470–1,182)	20	(13–27)	630	(399–861)
Using public water	10	(7–13)	3817	(2,579–5,055)	2	(0–5)	107	(0–252)	14	(3–24)	423	(95–752)
Using bottled water	89	(86–93)	34,253	(33,025–35,481)	81	(73–89)	3,976	(3,591–4,362)	66	(55–76)	2,054	(1,728–2,381)
Without money for immediate needs	4	(0–8)	1,433	(0–2,952)	7	(1–12)	336	(66–606)	10	(4–16)	317	(134–500)
Without access to a 3-day food supply	3	(0–6)	1,008	(0–2,372)	2	(0–3)	91	(12–170)	3	(1–6)	106	(17–196)
Health care and social support												
No access to prescription medications	6	(0–12)	2,265	(76–4,454)	4	(0–9)	204	(0–448)	9	(3–15)	280	(105–455)
Health-care services interrupted by the hurricane	17	(8–26)	6,359	(2,886–9,833)	12	(5–18)	566	(266–867)	12	(6–17)	361	(184–537)
Social support networks interrupted by the hurricane	32	(22–42)	12,313	(8,431–16,195)	18	(12–25)	901	(591–1,210)	19	(12–27)	610	(377–844)
With at least one older adult reporting a preexisting, physician-diagnosed medical condition	94	(89–98)	35,849	(34,208–37,489)	87	(81–94)	4,292	(3,970–4,615)	88	(82–94)	2,756	(2,575–2,938)
With at least one older adult reporting that the hurricane exacerbated a preexisting, physician-diagnosed medical condition	32	(22–42)	12,380	(8,559–16,201)	24	(15–32)	1,162	(733–1,592)	25	(17–32)	773	(533–1,014)
With at least one older adult reporting that the hurricane prevented normal care for a preexisting, physician-diagnosed medical condition	28	(17–39)	10,609	(6,421–14,797)	21	(12–31)	1,047	(596–1,499)	18	(8–27)	550	(264–837)

* Confidence interval.
† Projected number of affected households with a resident aged ≥60 years, based on 2000 U.S. Census estimates for Charlotte (38,301), DeSoto (4,909), and Hardee counties (3,134).

the desired 210 interviews were not completed in each assessment. Finally, this assessment represents the first time the cluster survey technique described here has been used to identify the needs of a specific subgroup within an affected population. Additional inquiry is necessary to determine the suitability of this approach.

Rapid needs assessments are critical in evaluating the health status and immediate needs of communities affected by disasters (*2–4*). A modified cluster-sampling method estimates both the percentage of the population and the number of households with a particular need (*5,6*). Data obtained through rapid needs assessments are used by decision-makers to identify where to provide immediate services and for planning for future post-disaster relief services. These assessments after Hurricane Charley provided critical information to SHRTOC and FLDOH about the status of households with older adult residents in hurricane-affected communities. SHRTOC is sharing the results of the assessments with the three counties and will use results in response planning and improving public health communications in affected communities. If the assessments had been performed earlier (e.g., 3–5 days after the hurricane) instead of 10–14 days after, results might have

been useful in guiding deployment decisions involving medical responders and mental health counselors. Follow-up to the initial assessments should be performed to ensure that identified needs have been addressed and to measure restoration of services and quality of life among older adults.

Acknowledgment

This report is based, in part, on contributions by the Hurricane Charley Rapid Needs Assessment Interview Teams.

References

1. U.S. Census Bureau. American Factfinder. Available at http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&_lang=en&_ts=.
2. CDC. Rapid health needs assessment following Hurricane Andrew—Florida and Louisiana, 1992. MMWR 1992;41:685–8.
3. CDC. Tropical Storm Allison rapid needs assessment—Houston, Texas, June 2001. MMWR 2002;51:365–9.
4. CDC. Rapid community health and needs assessments after Hurricanes Isabel and Charley—North Carolina, 2003–2004. MMWR 2004; 53:840–2.
5. Malilay J, Flanders WD, Brogan D. A modified cluster-sampling method for post-disaster rapid assessment of needs. Bull World Health Organ 1996;74:399–405.
6. Hlady GW, Quenemoen LE, Armenia-Cope RR, et al. Use of a modified cluster sampling method to perform rapid needs assessment after Hurricane Andrew. Ann Emerg Med 1994;23:719–25.

Rapid Community Health and Needs Assessments After Hurricanes Isabel and Charley — North Carolina, 2003–2004

On September 18, 2003, Hurricane Isabel, a Category 2 hurricane, made landfall on the Outer Banks of North Carolina (NC). The storm, moving to the northeast with winds exceeding 100 mph, caused extensive power outages and structural damage in northeastern NC and southern Virginia. In NC, approximately 762,000 residents lost power during the storm, and the shelter population peaked at an estimated 16,600 persons. Six storm-related fatalities were reported, and 26 eastern NC counties were included in a federal disaster area declaration (*1*). The North Carolina Division of Public Health (NCDPH) activated the Office of Public Health Preparedness and Response (PHPR) and seven Public Health Regional Surveillance Teams (PHRSTs) to conduct a rapid community health and needs assessment for the affected population. CDC deployed staff to provide technical support to NCDPH. The assessment determined that the majority of public health emergencies resulted from electric power outages, which affected access to food, water, and medical care. Data and recommendations were provided immediately to local and state emergency responders, who used the information to direct Hurricane Isabel recovery efforts and also to improve the assessment, which was next deployed in August 2004 with Hurricane Charley.

Two days after Hurricane Isabel struck, PHPR obtained information about storm damage from field assessments conducted by PHRSTs, reports from local health directors, damage reports from local emergency management offices, and aerial surveillance by the North Carolina Division of Emergency Management. This information was used to select a sample of 14 counties* in the most severely affected area of the state. The Outer Banks barrier islands were excluded from the sample because the majority of residents left the islands before storm landfall, and travel to the islands was restricted after the hurricane.

NCDPH and CDC developed a modified cluster-sampling method for population-based sampling in post-disaster needs assessments (*2,3*). Census blocks within the affected area were assembled into clusters of five blocks. In sparsely populated areas, blocks were combined to compensate for the low number of households in individual census blocks. Thirty census clusters were then selected with the probability of selection proportionate to the number of occupied housing units in the cluster. Occupied housing unit estimates were based on data from the 2000 U.S. Census. Assessment teams were composed of PHRST staff, with the assistance of students from the University of North Carolina School of Public Health and volunteers from other state agencies. Spanish-speaking interviewers were placed on teams assigned to census groups with large Hispanic populations. Language barriers did not prevent communication or completion of any interviews.

From a central area of the assigned cluster, teams moved sequentially along roadways to collect interviews at seven households in each cluster. In multiple-family dwellings (e.g., apartment buildings), one household was chosen randomly from each building. On Sunday, September 21, the teams collected 210 interviews. NCDPH and CDC staff entered data and conducted weighted cluster analysis by using EpiInfo. Data were analyzed to report the estimated proportion and projected number of households with a specific need or condition with a 95% confidence interval. On September 22, the report was submitted electronically to the Public Health Command Center in Raleigh, 4 days after the hurricane had struck.

The survey population was representative of the 93,738 occupied housing units identified by the 2000 U.S. Census; response rate was 62.3%, with 210 interviews completed. Households in the 14-county sample had an average of 2.7

* Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrell, and Washington counties.

persons before and after the hurricane. Children aged <2 years represented 4% of the sampled population, and adults aged ≥65 years represented 19%. Of the 210 households, 162 (77%) were in permanently anchored single-family structures, 44 (21%) were in mobile homes, and four (2%) were in multiple-family dwellings (e.g., apartment buildings).

A total of 137 (65%) households sampled were without electricity on the date of the survey (Table). Portable electrical generators were used after the hurricane in 64 (30%) homes. Other basic service interruptions included 50 (24%) households without running water, 44 (21%) without working cellular or landline telephone service, and 48 (23%) without a battery-operated radio. A total of 90 (43%) households were using bottled water, and 26 (12%) did not have a 3-day supply of food; 68 (32%) households had more than minimal damage but were habitable, and five (2%) were reported uninhabitable.

Few hurricane-related injuries or illnesses were reported. Two (1%) households had a member who experienced injury as a result of the hurricane, and 10 (5%) had a member who experienced hurricane-related illness. A total of 17 (8%) households reported a member who required medical care.

NCDPH and CDC provided assessment results to local health departments, local emergency operations centers, and the NC emergency operations center. Data from the report were used to direct resources, including feeding stations and allocation of bottled water, to affected communities. Information about the risks of using portable electrical generators was provided to local health departments.

Reported by: *J Morrow, MD, Pitt County Health Dept; E Norman, MPH, North Carolina Dept of Environmental and Natural Resources; R Dickens, DVM, North Carolina Dept of Agriculture; H Garrison, MD, T Morris, MD, K Henderson, MD, H Swygard, MD, S Ramsey, M Salyers, MD, B Worsham, North Carolina Public Health Regional Surveillance Teams 1–7; S Cline, DDS, J Kirkpatrick, MD, J Engel, MD, G Ghneim, DVM, M Davies, MD, K Sanford, MPH, W Service, MSPH, North Carolina Div of Public Health. WR Daley, DVM, S Young, MPH, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.*

Editorial Note: These findings indicated that the hurricane strike produced an emergency involving widespread electric

TABLE. Status of household* health and needs after Hurricane Isabel — North Carolina, 2003

Status	Households (%)	(95% CI†)	No. of households projected, 14-county area§	(95% CI)
External home				
Minimal or no damage	65.3	(55.6–75.0)	61,240	(52,143–70,337)
Damaged, habitable	32.3	(22.8–41.7)	30,292	(21,383–39,108)
Damaged, uninhabitable	2.4	(0.2–4.6)	2,251	(188–4,314)
Flood water in home				
None	96.6	(93.6–99.6)	90,594	(87,781–93,408)
1–12 inches	2.3	(0.2–4.5)	2,251	(188–4,220)
13–36 inches	1.1	(0.0–2.6)	1,032	(0–2,438)
Household utilities				
No running water	23.8	(10.7–37.0)	22,320	(10,035–34,700)
No electricity	65.2	(47.3–83.2)	61,147	(44,359–78,027)
No functioning indoor toilet	7.0	(3.1–10.8)	6,565	(2,907–10,129)
No working telephone	21.0	(9.4–32.5)	19,694	(8,816–30,479)
No battery-operated radio	22.6	(12.8–32.4)	21,195	(12,004–30,386)
Generator used	30.5	(18.8–42.3)	28,604	(17,631–39,670)
Hurricane-related illness or injury				
Injury in household	1.3	(0.0–3.1)	1,219	(0.0–2907)
Illness in household after hurricane	4.7	(1.7–7.6)	4,408	(1,594–7,128)
Experiencing stress	29.5	(20.0–39.1)	27,666	(18,757–36,669)
Requiring medical care	8.4	(0.3–16.5)	7,878	(281–15,474)
Problems obtaining medical care	4.9	(1.5–8.3)	4,595	(1,407–7,784)
Problems obtaining medication	6.0	(1.8–10.2)	5,627	(1,688–9,566)
Food and water				
Using well water	8.3	(1.0–15.7)	7,784	(938–1,4724)
Using public water	48.6	(35.6–61.6)	45,579	(33,387–57,770)
Using bottled water	43.1	(30.3–55.8)	40,420	(28,416–52,331)
Without access to a 3-day food supply	12.6	(4.2–20.9)	11,817	(3,939–19,601)

* N = 210.
† Confidence interval.
§ Based on combined 2000 U.S. Census estimates for the following counties: Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrell, and Washington.

power outages. The outages contributed to problems with access to medical care, access to food and water, and use of portable generators with subsequent risk for fire, electrocution, and exposure to carbon monoxide. Anecdotal reports from survey teams suggested that lower-income persons were more likely to report problems with access to food, water, and medical care and that questions about the socioeconomic status of survey respondents should be considered in future assessments.

Community needs assessments similar to this one have been employed after natural disasters, including hurricanes (*4,5*), floods (*6*), and ice storms (*7*). These assessments, which include estimates of the numbers of households with specific needs, can be used to identify unanticipated needs or effects (e.g., limited access to medical care) and provide valuable information to guide disaster response and recovery efforts.

This post-disaster assessment was the first of its kind in NC. Emergency response and public health officials were not always aware of the assessment and did not always have adequate time or information to use the data to shape recovery efforts. Responders should be provided with information about these assessments before a disaster so they can gauge the strengths, limitations, and potential uses of the data and recommendations provided.

NCDPH used experience gained during Hurricane Isabel to 1) develop the ability to conduct rapid community health and needs assessments by using in-state resources and 2) enhance logistic operations and methods for data collection. On August 17, 2004, NCDPH reported the results of its latest community health and needs assessment <72 hours after Hurricane Charley crossed through the state.

The Hurricane Charley assessment suggested that the storm did not have widespread public health impact in NC. However, NCDPH demonstrated new assessment capabilities with the use of geographic information systems technology and handheld computers. The state team used mapping software to generate and map seven random points in each of the census block groups, and interview teams navigated to the random points in their assigned census blocks by using handheld computers equipped with global positioning system plotters. Interview data were collected on the handheld computers from the household closest to the random point in the census block. These modifications simplified the mapping process and introduced a new method for randomization in the selection of households within the census block group. NC has used its experience with Hurricanes Isabel and Charley to incorporate community health and needs assessments into its public health response to all natural disasters and other public health emergencies.

References

1. North Carolina Disaster Field Office, North Carolina Emergency Management State Emergency Response Team. Hurricane Isabel situation report #35, October 11, 2003.
2. Malilay J, Flanders WD, Brogan D. A modified cluster-sampling method for post-disaster rapid assessment of needs. Bull World Health Organ 1996;74:399–405.
3. Hlady WG, Quenemoen LE, Armenia-Cope RR, et al. Use of a modified cluster sampling method to perform rapid needs assessment after Hurricane Andrew. Ann Emerg Med 1994;23:719–25.
4. CDC. Rapid health needs assessment following Hurricane Andrew—Florida and Louisiana, 1992. MMWR 1992;41:685–8.
5. CDC. Surveillance for injuries and illness and rapid health-needs assessment following Hurricanes Marilyn and Opal, September–October 1995. MMWR 1996;45:81–5.
6. CDC. Tropical Storm Allison rapid needs assessment—Houston, Texas, June 2001. MMWR 2002;51:365–9.
7. CDC. Community needs assessment and morbidity surveillance following an ice storm—Maine, January 1998. MMWR 1998;47:351–4.

Transfusion-Associated Transmission of West Nile Virus — Arizona, 2004

Blood transfusion–associated transmission (TAT) of West Nile virus (WNV) in the United States was first identified in 2002 (*1*). In 2003, blood collection agencies (BCAs) responded by screening donations for WNV by using nucleic acid–amplification tests (NATs) (*2*). The majority of BCAs use a two-tiered NAT-screening algorithm. On the basis of the test manufacturer's format, NATs are conducted on minipools of samples from either six or 16 blood donations. If a minipool is nonreactive, its constituent donations are released for transfusion. If a minipool is reactive, the constituent donations undergo individual testing. If an individual donation is reactive, associated blood components are impounded, and the donor is notified for further testing to confirm the infection. In 2003, blood-donation screening for WNV resulted in the impounding of approximately 800 blood components potentially containing WNV. However, six reported cases of transfusion-associated WNV disease were associated with units of blood components with viral concentrations too small to be detected by minipool NAT (*3*). In 2004, to improve the sensitivity of WNV screening, BCAs implemented systems to trigger a switch from minipool NAT to individual NAT in areas with epidemic WNV transmission. This report describes the first transfusion-associated WNV infection identified in 2004; the implicated blood donation was collected before the switch to individual testing. Clinicians should remain aware of the risk for WNV transmission through blood-product transfusion and alert state health officials to hospitalized patients with

WNV disease symptoms who have had a transfusion during the preceding 28 days.

Case Report

In July 2004, a man aged 43 years was admitted to a tertiary-care hospital in Maricopa County, Arizona, for an above-knee amputation necessitated by complications of diabetes mellitus. The patient was anemic and received two units of packed red blood cells (RBCs). His surgery occurred 3 days after admission, and he was discharged in stable condition 8 days later.

Two days after discharge, after a day of malaise, anorexia, and diarrhea, the man was found unresponsive and was admitted to a local hospital. On admission, his wound site was clean, but he was hypoglycemic and had an erythematous maculopapular rash on his upper extremities. He remained poorly responsive despite treatment for hypoglycemia, and the next day he was transferred to the tertiary-care hospital that had performed his amputation. On admission, he was febrile, had altered mental status, oscillopsia, and cogwheel rigidity. Magnetic resonance imaging of the brain was consistent with WNV encephalitis (*4*). The patient's cerebrospinal fluid was positive for WNV-specific IgM antibody by enzyme-linked immunosorbent assay at the Arizona Bureau of State Laboratory Services and positive for WNV RNA by reverse transcriptase–polymerase chain reaction at CDC.

The patient was discharged to a nursing home in mid-August and died 3 days later. Primary cause of death was cardiorespiratory failure secondary to severe progressive neurologic dysfunction. An autopsy was not performed.

The RBC units the patient received were produced from two donations collected in June in Maricopa County. Both donations were nonreactive by minipool NAT screening. Two fresh frozen plasma units associated with these donations were recalled and tested individually for WNV. One plasma unit was nonreactive by NAT, and a follow-up sample from the donor was negative for WNV IgM. The other plasma unit was reactive by NAT, but negative for WNV-specific IgM antibody. To determine the efficacy of minipool testing for this unit, a minipool including this plasma unit was reconstructed and was reactive in two of 10 replicated minipool NAT tests. Individual NAT was reactive in nine of 10 replicated tests. Follow-up donor serum was positive for WNV IgM.

Because the transfusion recipient had a confirmed WNV infection, the implicated donation was NAT reactive, and the associated donor seroconverted; this is considered a probable case of WNV TAT (*3*). As of July 27, only one WNV-infected horse and no human cases of WNV disease had been reported in the recipient's county of residence. However, this case does not meet the criteria for a confirmed case of WNV TAT because the patient traveled to an area experiencing epidemic WNV transmission for his amputation. Exposure of the patient to infectious mosquitoes while in this area cannot be ruled out.

Reported by: *S Caglioti, Blood Systems Laboratories, Tempe; P Tomasulo, MD, Blood Systems Incorporated, Scottsdale; R Raschke, MD, M Rodarte, DO, Banner Good Samaritan Medical Center, Phoenix; T Sylvester, A Diggs, MPH, Maricopa County Dept of Public Health; C Kioski, MPH, C Levy, MS, Arizona Dept of Health Svcs. M Traeger, MD, J Redd, MD, J Cheek, MD, Indian Health Svc. M Kuehnert, MD, Div of Viral and Rickettsial Diseases; S Montgomery, DVM, Div of Bacterial and Mycotic Diseases; A Marfin, MD, R Lanciotti, PhD, G Campbell, MD, T Smith, MD, Div of Vector-Borne Infectious Diseases, National Center for Infectious Diseases; J Brown, DVM, EIS Officer, CDC.*

Editorial Note: As of September 7, a total of 98 blood components potentially containing WNV had been removed from the U.S. blood supply during 2004. The risk for WNV transmission via blood products has been reduced but not eliminated. Minipool NAT is an effective screening method for WNV, but donations containing low levels of virus can escape detection by this test. Although individual NAT is more sensitive than minipool NAT, the United States has limited laboratory capacity and test reagent availability for NAT. For this reason, BCAs developed systems to trigger a switch from minipool to individual NAT in areas of epidemic WNV transmission (*5*). Nonetheless, in the case described in this report, results of testing the implicated donation revealed that even individual NAT might not have detected WNV (i.e., in one of 10 tests).

BCAs in the United States had not planned to implement their trigger systems until June 2004. However, the WNV epidemic in Maricopa County began in May, earlier than widespread WNV was expected. Evidence of year-round WNV activity has been documented in east Texas and Louisiana (*6*). This year's experience demonstrates that BCAs might need to prepare for onset of human WNV transmission as early as May in areas of the country similar to Arizona. As a result of the case described in this report, the BCA involved plans to implement its trigger system year-round in all its collection areas.

Clinicians should consider WNV disease in any patient with consistent symptoms who has received a blood transfusion during the 28 days preceding illness onset. Suspected cases should be reported to state health authorities, who are encouraged to notify CDC. The vigilance of clinicians and public health officials is essential to identify breakthrough TAT cases. Identification of such cases allows recovery of stored components that might contain WNV, which further increases the safety of the blood supply.

The benefits of blood transfusion far outweigh the risk for transfusion-associated WNV disease. However, clinicians should use blood products judiciously to reduce the risk for adverse events and should be alert for cases of transfusion-associated WNV disease. BCAs will continue to evaluate WNV-screening strategies in consultation with CDC and the Food and Drug Administration to ensure that blood products are as safe as possible.

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References

1. Pealer LN, Marfin AA, Petersen LR, et al. Transmission of West Nile virus through blood transfusion in the United States in 2002. N Engl J Med 2003;349:1236–45.
2. CDC. Detection of West Nile virus in blood donations—United States, 2003. MMWR 2003;52:769–72.
3. CDC. Update: West Nile virus screening of blood donations and transfusion-associated transmission—United States, 2003. MMWR 2004;53:281–4.
4. Solomon T. *Flavivirus encephalitis* [Review]. N Engl J Med 2004;351:370–8.
5. Custer B, Tomasulo PA, Murphy EL, et al. Triggers for switching from mini-pool nucleic acid technology testing to individual donation testing: analysis of 2003 data to inform 2004 decision-making. Transfusion 2004 (in press).
6. Tesh RB, Parsons R, Siirin M, et al. Year-round West Nile virus activity, Gulf Coast region, Texas and Louisiana. Emerg Infect Dis 2004;10:1649–52.

Participation in High School Physical Education — United States, 1991–2003

Physical education (PE) can increase student participation in moderate to vigorous physical activity (*1*) and help high school students gain the knowledge, attitudes, and skills they need to engage in lifelong physical activity (*2*). Two national health objectives for 2010 are to 1) increase to ≥50% the proportion of adolescents who participate in daily school PE (objective no. 22-9) and 2) increase to ≥50% the proportion of adolescents who spend at least half of school PE class time being physically active (objective no. 22-10) (*3*). To examine changes in PE class participation among high school students in the United States during 1991–2003, CDC analyzed data from the national Youth Risk Behavior Survey (YRBS). This report summarizes the results of that analysis, which indicated that 1) the proportion of students attending PE class daily declined significantly during 1991–1995 and did not change during 1995–2003 and 2) the proportion of students exercising or playing sports for >20 minutes during PE class 3–5 days per week did not change significantly during 1991–2003. If the national health objectives are to be achieved, coordinated efforts involving schools, communities, and policy makers are needed to provide daily, quality PE for all youth.

The national YRBS, a component of CDC's Youth Risk Behavior Surveillance System, used independent three-stage cluster samples for the 1991–2003 surveys to obtain cross-sectional data representative of public- and private-school students in grades 9–12 in the 50 states and the District of Columbia. During 1991–2003, sample sizes ranged from 10,904 to 16,296, school response rates ranged from 70% to 81%, student response rates ranged from 83% to 90%, and overall response rates ranged from 60% to 70%. For each cross-sectional survey, students completed an anonymous, self-administered questionnaire that included identically worded questions about participation in PE class.

For this analysis, temporal changes were assessed for three behaviors: 1) being enrolled in a PE class (i.e., attending a PE class on ≥1 day in an average week when in school), 2) attending PE class daily (i.e., 5 days in an average week when in school), and 3) being physically active during PE class, as defined in the national health objective 22-10 baseline measure (i.e., among all students, exercising or playing sports for >20 minutes during an average PE class 3–5 days per week). Data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students because the numbers of students from other racial/ethnic populations were too small for meaningful analysis.

Data were weighted to provide national estimates, and SUDAAN was used for all data analyses. Temporal changes were analyzed by using logistic regression analyses that assessed linear and quadratic time effects simultaneously and controlled for sex, race/ethnicity, and grade. Quadratic trends indicated significant but nonlinear trends in the data over time. When a significant quadratic trend accompanied a significant linear trend, the data demonstrated a nonlinear variation (e.g., leveling off or change in direction) in addition to an overall increase or decrease over time. All results were statistically significant ($p<0.05$) unless otherwise noted.

During 1991–2003, the prevalence of students being enrolled in PE class overall and among female, male, white, Hispanic, 9th-, 10th-, 11th-, or 12th-grade students did not change significantly (Table). Among black students, the prevalence of being enrolled in PE class declined significantly during 1991–1997 and did not change significantly during 1997–2003.

TABLE. Percentage of high school students who were enrolled in physical education (PE) class*, attended PE class daily†, and were physically active in PE class§, by selected characteristics — Youth Risk Behavior Survey, United States, 1991–2003¶

Characteristic	1991 %	1991 (95% CI**)	1993 %	1993 (95% CI)	1995 %	1995 (95% CI)	1997 %	1997 (95% CI)	1999 %	1999 (95% CI)	2001 %	2001 (95% CI)	2003 %	2003 (95% CI)
Enrolled in PE class														
Sex														
Female	45.0	(±5.5)	48.8	(±5.3)	56.9	(±13.4)	44.9	(±11.2)	51.5	(±7.6)	48.0	(±6.0)	52.8	(±7.7)
Male	52.8	(±6.5)	55.2	(±5.7)	62.2	(±10.1)	52.0	(±11.2)	60.7	(±7.0)	55.6	(±3.9)	58.5	(±7.2)
Race/Ethnicity														
White, non-Hispanic	45.5	(±6.5)	50.6	(±6.4)	62.9	(±13.8)	49.5	(±15.0)	56.1	(±9.7)	48.3	(±4.5)	53.7	(±9.7)
Black, non-Hispanic	60.7	(±8.2)	55.7	(±4.6)	50.2	(±4.7)	46.3	(±5.7)	52.9	(±13.8)	60.5	(±9.3)	56.0	(±6.2)††
Hispanic	54.3	(±7.6)	53.9	(±5.4)	51.0	(±8.4)	51.6	(±5.3)	59.3	(±8.0)	58.4	(±7.2)	58.8	(±5.0)
Grade														
9th	75.8	(±4.9)	77.2	(±5.5)	80.7	(±5.5)	69.2	(±6.9)	78.9	(±5.9)	73.7	(±5.7)	71.0	(±6.9)
10th	59.9	(±8.6)	57.3	(±7.6)	72.0	(±10.9)	53.3	(±12.7)	60.9	(±11.6)	54.1	(±6.0)	60.7	(±9.0)
11th	32.4	(±8.7)	40.9	(±8.0)	46.5	(±18.8)	39.3	(±11.8)	40.7	(±9.7)	39.1	(±7.2)	45.7	(±8.8)
12th	27.4	(±7.4)	35.6	(±7.6)	42.2	(±17.9)	36.1	(±13.6)	36.6	(±11.3)	31.3	(±5.4)	39.5	(±8.9)
Total	**48.9**	**(±5.5)**	**52.1**	**(±5.3)**	**59.6**	**(±11.5)**	**48.8**	**(±10.9)**	**56.1**	**(±7.2)**	**51.7**	**(±4.6)**	**55.7**	**(±7.3)**
Attended PE class daily														
Sex														
Female	37.4	(±5.5)	31.1	(±4.8)	23.5	(±8.6)	24.6	(±5.4)	26.3	(±9.1)	28.4	(±5.1)	26.4	(±6.1)††§§
Male	45.6	(±6.3)	37.3	(±5.5)	27.0	(±10.3)	29.8	(±6.5)	31.9	(±10.0)	36.3	(±5.4)	30.5	(±5.7)††§§
Race/Ethnicity														
White, non-Hispanic	38.6	(±6.7)	32.1	(±5.5)	21.7	(±11.7)	23.8	(±6.8)	28.3	(±12.9)	29.5	(±5.2)	24.9	(±7.0)§§
Black, non-Hispanic	51.9	(±6.8)	43.0	(±5.3)	33.8	(±4.8)	32.5	(±5.8)	29.2	(±9.9)	40.8	(±11.4)	33.0	(±6.3)††§§
Hispanic	46.6	(±5.7)	39.7	(±4.1)	33.1	(±7.7)	38.4	(±3.9)	40.4	(±9.3)	38.7	(±6.2)	36.7	(±8.0)§§
Grade														
9th	65.8	(±6.0)	52.7	(±6.5)	41.2	(±19.2)	42.6	(±10.5)	42.1	(±12.6)	48.7	(±7.4)	37.9	(±8.6)§§
10th	51.8	(±8.7)	40.1	(±6.1)	34.4	(±15.6)	30.6	(±6.4)	30.4	(±9.7)	31.6	(±6.1)	31.3	(±8.0)††§§
11th	27.4	(±8.0)	23.8	(±5.8)	15.0	(±6.0)	19.3	(±3.8)	20.0	(±8.6)	22.8	(±4.7)	22.6	(±4.6)††
12th	21.2	(±6.3)	22.8	(±5.8)	12.9	(±4.9)	19.1	(±5.7)	20.1	(±10.0)	20.3	(±5.1)	18.2	(±4.0)
Total	**41.6**	**(±5.5)**	**34.3**	**(±4.8)**	**25.4**	**(±9.4)**	**27.4**	**(±5.6)**	**29.1**	**(±9.5)**	**32.2**	**(±4.9)**	**28.4**	**(±5.7)††§§**
Physically active during PE class														
Sex														
Female	30.6	(±4.3)	29.7	(±5.8)	29.2	(±5.5)	26.5	(±5.0)	31.9	(±4.8)	34.6	(±4.9)	34.7	(±3.9)
Male	42.7	(±5.3)	40.6	(±6.7)	37.2	(±4.2)	36.3	(±5.3)	45.0	(±5.4)	43.6	(±3.6)	43.6	(±4.5)
Race/Ethnicity														
White, non-Hispanic	35.5	(±5.6)	34.4	(±7.3)	34.2	(±5.1)	31.4	(±5.9)	39.6	(±6.5)	37.5	(±3.9)	38.9	(±5.7)
Black, non-Hispanic	41.7	(±4.8)	37.9	(±4.9)	28.2	(±3.1)	31.2	(±5.0)	32.2	(±8.1)	39.9	(±7.0)	33.9	(±3.7)††§§
Hispanic	38.8	(±4.7)	39.1	(±4.8)	31.4	(±5.4)	36.3	(±3.8)	41.0	(±5.4)	43.4	(±4.8)	41.1	(±4.1)
Grade														
9th	55.7	(±5.0)	52.0	(±6.6)	49.8	(±7.6)	46.7	(±5.4)	55.2	(±7.8)	54.8	(±5.7)	49.5	(±5.1)
10th	45.2	(±7.4)	39.7	(±7.3)	42.4	(±8.9)	35.2	(±7.3)	40.7	(±6.5)	40.6	(±4.7)	43.6	(±6.1)
11th	25.2	(±6.9)	26.6	(±8.1)	22.0	(±8.0)	23.6	(±4.5)	29.3	(±7.0)	30.3	(±5.1)	31.1	(±4.6)
12th	20.9	(±5.7)	25.2	(±6.9)	21.3	(±7.1)	23.8	(±7.6)	23.7	(±7.7)	24.1	(±4.3)	28.3	(±5.7)
Total	**36.8**	**(±4.4)**	**35.4**	**(±6.1)**	**33.3**	**(±4.5)**	**31.8**	**(±4.8)**	**38.5**	**(±4.9)**	**38.9**	**(±3.8)**	**39.2**	**(±3.9)**

* On ≥1 days in an average week when they were in school.
† On 5 days in an average week when they were in school.
§ Among all students, exercised or played sports >20 minutes during an average PE class 3–5 days per week.
¶ Linear and quadratic trend analyses were conducted by using a logistic regression model controlling for sex, race/ethnicity, and grade. Prevalence estimates were not standardized by demographic variables.
** Confidence interval.
†† Significant (p<0.05) quadratic effect.
§§ Significant linear effect.

Significant linear and quadratic trends were detected for attending PE class daily. Overall, the prevalence of attending PE class daily declined significantly from 1991 (41.6%) to 1995 (25.4%) and did not change significantly from 1995 (25.4%) to 2003 (28.4%). Similar significant linear and quadratic trends were detected among female and male students. A significant decline during 1991–1999, followed by no significant change during 1999–2003, was detected among black and 10th-grade students. A significant decline during 1991–1995, followed by a significant increase during 1995–2003, was detected among 11th-grade students. A significant linear decline during 1991–2003 was detected among white, Hispanic, and 9th-grade students.

During 1991–2003, the prevalence of being physically active during PE class, overall, and among female, male, white, Hispanic, 9th-, 10th-, 11th-, and 12th-grade students did not change significantly. Among black students, the prevalence of being physically active during PE class declined significantly during 1991–1995 and did not change significantly during 1995–2003.

Reported by: *R Lowry, MD, N Brener, PhD, S Lee, PhD, Div of Adolescent and School Health; J Epping, MEd, J Fulton, PhD, Div of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion; D Eaton, PhD, EIS Officer, CDC.*

Editorial Note: The prevalence of overweight among U.S. adolescents aged 12–19 years has tripled, from 5% in 1980 to 15% in 2000 (*4*). Inactivity among adolescents is a contributing factor to the increasing trends in overweight (*5*). Regular physical activity has additional health benefits, including improvements in aerobic endurance and muscular strength, reduction of risk factors for cardiovascular and other chronic diseases, increases in bone mass density, higher levels of self-esteem and self-concept, and lower levels of anxiety and stress (*2*). In 2003, one third of high school students did not engage in the minimum recommended level of moderate or vigorous physical activity (*6*). Schools have been recognized as a key setting for increasing participation in physical activity among students (*5*). The findings in this report indicate that the prevalence of being enrolled in PE class and being physically active during PE class has not increased since 1991. In addition, the prevalence of attending PE class daily declined significantly during 1991–1995 and did not change during 1995–2003.

The findings in this report are subject to at least two limitations. First, these data pertain only to youths who attended high school. Nationwide, among persons aged 16–17 years, approximately 6% were not enrolled in a high school program and had not completed high school (*7*). Second, the extent of underreporting or overreporting in YRBS cannot be determined; however, the survey questions demonstrate test/retest reliability (*8*).

Progress has not been made toward reaching the national health objectives for 2010 related to PE. In 2003, only 55.7% of high school students were enrolled in a PE class, only 28.4% were attending PE class daily, and only 39.2% were physically active during PE class. In addition, female students and students in higher grades were consistently at greatest risk for not reaching the national health objectives for PE. To help schools implement comprehensive school health programs aimed at increasing physical activity among youth, CDC developed Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People (*2*). Although the guidelines recommend daily PE for all students, only 5.8% of senior high schools require daily PE or its equivalent for the entire school year for students in all grades in the school (*9*).

A coordinated, multilevel approach involving schools, communities, and policy makers is needed to increase participation in daily, quality PE among all students (*2,10*). This might be particularly important for high school students, as physical activity levels tend to decline substantially during adolescence (*5,6*). Schools and communities should ensure that PE programs have sufficient resources to deliver quality instruction, consistent with national standards, in safe, attractive, and well-maintained facilities. Policies should require that PE instruction be provided by credentialed PE teachers in classes with teacher-to-student ratios comparable with those in other subjects. Teachers should use methods that allow students to be actively engaged during most of the class time. Curricula should emphasize participation in physical activities for all students and help students gain the knowledge, attitudes, motor skills, behavioral skills, and confidence they will need to adopt and maintain physically active lifestyles.

References

1. CDC. Increasing physical activity: a report on recommendations of the Task Force on Community Preventive Services. MMWR 2001;50(No. RR-18).
2. CDC. Guidelines for school and community programs to promote lifelong physical activity among young people. MMWR 1997;46(No. RR-6).
3. U.S. Department of Health and Human Services. Healthy People 2010 (conference ed., 2 vols.). Washington, DC: U.S. Department of Health and Human Services, 2000.
4. Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999–2000. JAMA 2002;288:1728–32.
5. U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.
6. Grunbaum JA, Kann L, Kinchen S, et al. Youth Risk Behavior Surveillance—United States, 2003. In: Surveillance Summaries, May 21, 2004. MMWR 2004;53(No. SS-2).
7. Kaufman P, Alt M, Chapman C. Dropout rates in the United States: 2000. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001; report no. NCES 2002-114.
8. Brener ND, Kann L, McManus T, Kinchen SA, Sundberg EC, Ross JG. Reliability of the 1999 Youth Risk Behavior Survey questionnaire. J Adolesc Health 2002;31:336–42.
9. Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: Results from the School Health Policies and Programs Study 2000. J Sch Health 2001;71:279–93.
10. CDC. School Health Index: A Self-Assessment and Planning Guide. Middle school/high school version. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2004.

Use of Vitamins Containing Folic Acid Among Women of Childbearing Age — United States, 2004

Neural tube defects (NTDs) are serious birth defects of the spine (spina bifida) and brain (anencephaly), affecting approximately 3,000 pregnancies each year in the United States (*1*). Periconceptional consumption of the B vitamin folic acid reduces the occurrence of NTDs by 50%–70% (*2*). To prevent these defects, the U.S. Public Health Service (1992) and Institute of Medicine (1998) issued separate recommendations that all women capable of becoming pregnant consume 400 μg of folic acid daily, and the Food and Drug Administration mandated fortification of cereal grain products with folic acid to increase women's daily intake (*3,4*). Fortification of the U.S. food supply with folic acid has resulted in a 26% reduction in NTDs (*1*). However, even with fortification, not all women receive adequate levels of folic acid from their diets. Therefore, increasing the use of vitamins containing folic acid remains an important component of NTD prevention (*3*). To monitor the use of vitamins containing folic acid among women of childbearing age, the Gallup Organization has conducted a series of surveys for the March of Dimes Birth Defects Foundation since 1995. This report presents results from the 2004 survey, which indicated that although no substantial increase in the proportion of women who use vitamins containing folic acid* daily occurred during 1995–2003, a substantial increase was observed in 2004, with 40% of women aged 18–45 years reporting daily consumption of a vitamin containing folic acid. This report also presents information about women's dieting behaviors. Regardless of dieting status, public health programs should stress the importance of women in their childbearing years consuming 400 μg of

*Women who reported taking a multivitamin, prenatal vitamin, or a folic acid only supplement in response to the question, "What type of vitamin or mineral supplements do you take?" were coded as taking a vitamin containing folic acid (consistent with all previous surveys).

folic acid daily through supplements, fortified foods, and a diet containing folate-rich foods.

The Gallup surveys are conducted via a random-digit-dialed telephone interview of a proportionate stratified sample of approximately 2,000 women (5). The response rate for the 2004 survey was 36% (2,012 women); since 1995, response rates have ranged from 24% to 52%. Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones. The margin of error for estimates based on the total sample size is ±3%. The methods used have been described previously (5). The survey includes questions about women's awareness of and knowledge about folic acid, their use of vitamins containing folic acid and, new in 2004, questions about dieting.

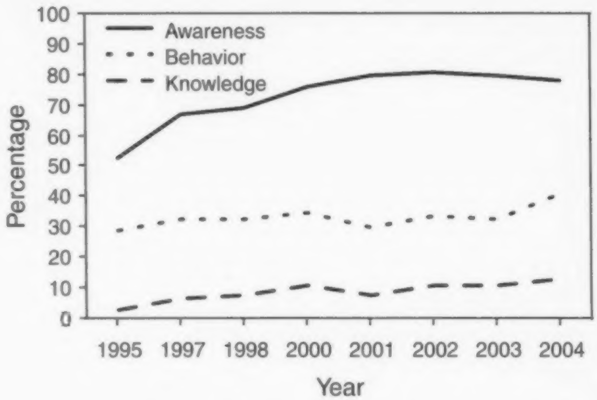
In 2004, 40% of women reported taking vitamins containing folic acid, compared with 32% in 2003. This increase was consistent across most demographic characteristics; however, non-white, young, and less educated women remain the least likely to report taking a vitamin containing folic acid daily (Table 1). In contrast to the increase in consumption, awareness of and knowledge about folic acid remained unchanged. Women's awareness decreased 2 percentage points in 2004 to 77%. Their knowledge that folic acid prevents birth defects (24%) and that it should be taken before pregnancy (12%) increased slightly, from 21% and 10% in 2003, respectively (Figure).

TABLE 1. Percentage of women aged 18–45 years who reported taking folic acid daily, by selected sociodemographic characteristics — United States, 2003–2004*

Characteristic	2003	2004
Race		
White	34	43
Non-white	28	31
Ethnicity		
Hispanic	29	38
Non-Hispanic	33	40
Age group (yrs)		
18–24	25	31
25–34	34	39
35–45	35	46
Education		
<High school	21	19
High school	28	32
College (any)	37	48
Annual household income		
<$25,000	24	30
$25,000–$39,999	31	40
$40,000–$49,999	39	48
≥$50,000	38	46
Women not pregnant	30	37
Total	**32**	**40**

* Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones.

FIGURE. Percentage of women aware of* or knowledgeable about† folic acid and percentage using vitamins containing folic acid daily, by year — United States, 1995–2004§



* Includes women who had heard, read, or seen anything about folic acid.
† Includes women who knew that folic acid should be taken before pregnancy.
§ Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones.

Twenty-four percent of women aged 18–45 years reported dieting during the preceding 6 months. Of these, 44% were taking a vitamin containing folic acid daily and were nearly 30% more likely to be taking folic acid than non-dieters (odds ratio [OR] = 1.3; 95% confidence interval [CI] = 1.1–1.5 [$p<0.01$]). In addition, 48% of dieting women were on a low-carbohydrate diet. Women who reported being on a low-carbohydrate diet tended to have at least some college education (72%) and an income of ≥$50,000 (50%), compared with women who were on other diets or were not dieting (Table 2). Of the women on a low-carbohydrate diet, 49% reported taking a daily vitamin containing folic acid and were approximately 50% more likely to do this than women on other diets (OR = 1.5; 95% CI = 1.2–2.0 [$p<0.01$]). In addition, women on low-carbohydrate diets were 40% more likely than women on other diets to believe that folic acid is important for women of childbearing age (OR = 1.4; 95% CI = 1.1–1.9 [$p<0.05$]).

Reported by: *H Carter, MPH, Assoc for Teachers of Preventive Medicine; LLM Lindsey, PhD, CDC Foundation, Atlanta, Georgia. JR Petrini, PhD, March of Dimes Birth Defects Foundation, White Plains, New York. C Prue, PhD, J Mulinare, MD, Div of Birth Defects and Developmental Disabilities, National Center on Birth Defects and Developmental Disabilities, CDC.*

TABLE 2. Prevalence of dieting behaviors among women, by selected characteristics — United States, 2003–2004*†

Characteristic	Dieting: Low-carbohydrate diet (%)	Dieting: Other (%)	Non-dieting (%)
Age group (yrs)			
18–24	6	19	24
25–34	38	29	33
35–45	45	50	40
Marital status			
Single/Never married	19	28	32
Married	66	58	54
Divorced	10	10	8
Separated	4	2	3
Widowed	<1	<1	1
Pregnancy status			
Not pregnant	96	96	94
Pregnant	2	3	5
Race			
White	71	73	69
Non-white	27	25	29
Ethnicity			
Hispanic	14	10	12
Non-Hispanic	84	89	86
Education			
<High school	5	14	11
High school	23	23	28
College (any)	72	61	59
Annual household income			
<$25,000	14	25	29
$25,000–$39,999	18	17	18
$40,000–$49,999	10	11	10
≥$50,000	50	38	30
Take folic acid daily			
Yes	49	40	39
No	50	60	61

* Refused/don't know responses not included.
† Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones.

Editorial Note: The reported increase in consumption of a vitamin containing folic acid among women of childbearing age from 32% in 2003 to 40% in 2004 suggests a substantial change in behavior. This change has not been previously observed in the March of Dimes survey. Although this increase is encouraging, no clear rationale explains the reported change, and results should be interpreted with caution.

The findings in this report suggest that the proportion of reproductive-age women not consuming vitamins containing folic acid daily is 60%; therefore, efforts are needed to increase supplement use in conjunction with a healthy diet to lower the incidence of NTDs. CDC is developing a program focused on ensuring that every woman of childbearing age has optimal nutrition throughout her lifetime by encouraging women to consume 400 μg of folic acid daily from supplements, fortified food, or both, in addition to consuming food folate from a varied diet, ensuring that they consume 100% of the recommended daily value of folic acid.

The survey results indicated that nearly 25% of reproductive-age women in the United States had dieted during the preceding 6 months. Nearly half of dieting women reported being on low-carbohydrate diets, which could reduce the amount of fortified and folate-rich foods they consume. These women have a particular need to supplement their diets with 400 μg of folic acid daily because many of the enriched and fortified foods usually consumed are limited in low-carbohydrate diets. In comparison with other women participating in the survey, women on a low-carbohydrate diet tended to have a higher level of education and household income. Women most likely to take vitamins containing folic acid also tended to have higher education and household income levels, and the association between women's diet and consumption of vitamins containing folic acid might be confounded by their level of education and household income.

Increasing understanding of when and why a woman chooses to take a vitamin containing folic acid is important for public health efforts directed at achieving the 2010 national health objective to increase to 80% the number of women consuming 400 μg of folic acid daily (objective no. 16–16a) (*6*). The fact that 40% of reproductive-age women are now consuming 400 μg of folic acid every day represents an important step toward meeting that objective; however, the proportion of women not consuming a vitamin containing folic acid is 60%, underscoring the need for continued public health efforts to increase folic acid consumption. These percentages only include supplementation from a vitamin containing folic acid and not consumption of fortified foods.

The findings in this report are subject to at least two limitations. First, although the response rates for previous studies have not been substantial, the low response rate in 2004 could indicate a difference between the women who respond and those who do not. The majority of respondents to the survey were white; however, respondents' age, household income, and education level were distributed evenly. Second, 2004 is the first year for which data have been collected on dieting behavior; thus, associations between dieting behavior and vitamin consumption cannot be made, and further study is needed to validate these results.

Although verifying independently the increase in vitamin consumption is difficult, this increase suggests a potential impact on the number of pregnancies affected by an NTD. The increase in consumption of vitamins containing folic acid

could translate to an estimated 200 fewer infants born with NTDs[†] in the United States. Supplement use in conjunction with food fortification represents an important combination of strategies for achieving reductions in NTDs (*1*). However, if women's dietary habits change in a manner that reduces consumption of fortified foods, supplementation becomes even more important. Public health programs that emphasize the need to consume folic acid daily from supplements, fortified food, or both, in addition to consuming food folate from a varied diet, might reduce the number of infants born with NTDs. Therefore, continued efforts are needed to ensure that all women capable of becoming pregnant consume 400 μg of folic acid daily.

References

1. CDC. Spina bifida and anencephaly before and after folic acid mandate—United States, 1995–1996 and 1999–2000. MMWR 2004;53:362–5.
2. Medical Research Council Vitamin Study Research Group. Prevention of neural tube defects: results of the Medical Research Council Vitamin Study. Lancet 1991;338:131–7.
3. CDC. Recommendation for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. MMWR 1992;41(No. RR-14).
4. Institute of Medicine. Dietary reference intake: folate, other B vitamins, and choline. Washington, DC: National Academy Press, 1998.
5. CDC. Knowledge and use of folic acid by women of childbearing age—United States, 1995. MMWR 1995;44:716–8.
6. U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. With Understanding and Improving Health and Objectives for Improving Health (2 vols.). Washington, DC: U.S. Department of Health and Human Services, 2000.
7. U.S. Census Bureau. Unpublished census file. Estimate of the United States population by sex and age: 2000. Washington, DC: U.S. Census Bureau, 2004. Available at http://factfinder.census.gov/servlet/SAFFPeople?_sse=on.
8. Ventura SJ, Abma JC, Mosher WD. Estimated pregnancy rates for the United States, 1990–2000: an update. Natl Vital Stat Rep 2004;52:1–10.
9. Williams LJ, Mai CT, Edmonds LD, et al. Prevalence of spina bifida and anencephaly during the transition of mandatory folic acid fortification in the United States. Teratology 2002;66:33–9.

[†] Number of women in the United States (aged 15–44 years): 61,576,997 (*7*). Number of women taking a vitamin containing folic acid in 2003 (32%): 19,704,639. Number of women taking a vitamin containing folic acid in 2004 (40%): 24,630,799. Number of additional women taking a vitamin containing folic acid in 2004: 4,926,160. Number of additional pregnancies with enough folic acid in 2004 (pregnancy rate for women aged 15–44 years: 104.00 per 1,000): 512,321 (*8*). Number of pregnancies affected by spina bifida (SB) (rate: 4.04 per 10,000 with prenatal ascertainment): 207 (*9*). Number of pregnancies affected by anencephaly (AN) (rate: 3.36 per 10,000 with prenatal ascertainment): 172 (*9*). Number of total pregnancies affected by SB/AN: 379. Number of pregnancies unaffected by an NTD (based on a 50% reduction): 190 (*3*).

West Nile Virus Activity — United States, September 8–14, 2004

During September 8–14, a total of 195 cases of human West Nile virus (WNV) illness were reported from 26 states (Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Maryland, Minnesota, Missouri, Nebraska, Nevada, New Mexico, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, and Wisconsin).

During 2004, a total of 39 states have reported 1,386 cases of human WNV illness to CDC through ArboNET (Table, Figure). Of these, 392 (28%) cases were reported from California, 345 (25%) from Arizona, and 225 (16%) from Colorado. A total of 764 (57%) of the 1,347 cases for which all data were available occurred in males; the median age of patients was 51 years (range: 1 month–99 years). Illness onset ranged from April 23 to September 8; a total of 35 cases were fatal.

A total of 124 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET in 2004. Of these, 37 (30%) were reported from Arizona; 35 from California; 15 from Texas; 11 from New Mexico; five from Colorado; four from Georgia; three each from Florida and South Dakota; two each from Missouri, Oklahoma, and Wisconsin; and one each from Iowa, Louisiana, Minnesota, Nebraska, and North Dakota. Of the 124 PVDs, five persons aged 35, 50, 66, 69, and 77 years subsequently had neuroinvasive illness, and 27 persons (median age: 54 years; range: 17–73 years) subsequently had West Nile fever.

In addition, during 2004, a total of 3,946 dead corvids and 868 other dead birds with WNV infection have been reported from 44 states and New York City. WNV infections have been reported in horses from 34 states (Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, Wisconsin, West Virginia, and Wyoming) and in five dogs from Nevada and New Mexico. Three squirrels with WNV infection were reported from Arizona. Four unidentified animal species with WNV infection were reported from Idaho, Illinois, Iowa, and Nevada. WNV seroconversions have been reported in 690 sentinel chicken flocks from 13 states (Alabama, Arizona, Arkansas, California, Delaware, Florida, Iowa, Louisiana, Nebraska, Nevada, Pennsylvania, South Dakota, and Utah) and in seven wild hatchling birds from Missouri and Ohio. Three seropositive sentinel horses were reported from Puerto

TABLE. Number of human cases of West Nile virus (WNV) illness, by state — United States, 2004*

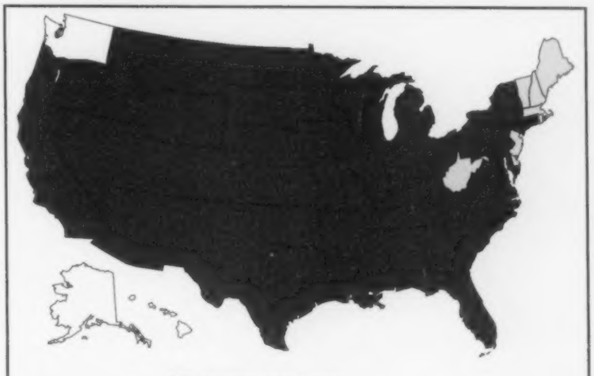
State	Neuroinvasive disease†	West Nile fever§	Other clinical/ unspecified¶	Total reported to CDC**	Deaths
Alabama	9	0	0	**9**	0
Arizona	130	40	175	**345**	5
Arkansas	5	6	0	**11**	0
California	95	144	153	**392**	12
Colorado	32	193	0	**225**	2
Connecticut	0	1	0	**1**	0
Florida	21	6	0	**27**	1
Georgia	4	3	1	**8**	0
Idaho	0	0	2	**2**	0
Illinois	14	11	1	**26**	1
Indiana	2	0	0	**2**	0
Iowa	3	4	2	**9**	1
Kansas	15	0	0	**15**	0
Kentucky	0	3	0	**3**	0
Louisiana	30	4	0	**34**	3
Maryland	4	3	0	**7**	0
Michigan	3	0	0	**3**	0
Minnesota	8	9	0	**17**	0
Mississippi	9	7	1	**17**	2
Missouri	9	2	3	**14**	0
Montana	1	3	0	**4**	0
Nebraska	0	10	0	**10**	0
Nevada	17	12	1	**30**	0
New Mexico	18	25	4	**47**	2
New York	3	2	0	**5**	0
North Carolina	2	0	0	**2**	0
North Dakota	2	16	0	**18**	1
Ohio	2	1	0	**3**	1
Oklahoma	3	1	0	**4**	1
Oregon	0	1	0	**1**	0
Pennsylvania	2	2	0	**4**	0
South Carolina	0	1	0	**1**	0
South Dakota	5	25	0	**30**	1
Tennessee	5	1	0	**6**	0
Texas	25	8	0	**33**	2
Utah	3	2	0	**5**	0
Virginia	2	0	1	**3**	0
Wisconsin	4	3	0	**7**	0
Wyoming	2	4	0	**6**	0
Total	**489**	**553**	**344**	**1,386**	**35**

* As of September 14, 2004.
† Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).
§ Cases with no evidence of neuroinvasion.
¶ Illnesses for which sufficient clinical information was not provided.
** Total number of human cases of WNV illness reported to ArboNet by state and local health departments.

Rico. A total of 5,248 WNV-positive mosquito pools have been reported from 32 states and New York City.

Additional information about national WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and at http://westnilemaps.usgs.gov.

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*



* As of 3 a.m., Mountain Standard Time, September 14, 2004.

Notice to Readers

Pneumococcal Conjugate Vaccine Shortage Resolved

Since February 2004, CDC has recommended that 7-valent pneumococcal conjugate vaccine (PCV7), marketed as Prevnar® and manufactured by Wyeth Vaccines (Collegeville, Pennsylvania), be administered to healthy children on an abbreviated schedule to conserve the limited supply (*1–3*). Production capacity has been increased, and supply is now sufficient to meet the national demand for vaccine on the routine, 4-dose schedule. Effective immediately, CDC, in consultation with the Advisory Committee on Immunization Practices, the American Academy of Family Physicians, and the American Academy of Pediatrics, recommends that providers resume administration of PCV7 according to the routine schedule (*4–6*).

A vaccination schedule is provided for children who are incompletely vaccinated (Table). The highest priority for catch-up vaccination is to ensure that children aged <5 years at high risk for invasive pneumococcal disease because of certain immunocompromising or chronic conditions (e.g., sickle cell disease, asplenia, chronic heart or lung disease, diabetes, cerebrospinal fluid leak, cochlear implant, or human immunodeficiency virus infection) are fully vaccinated. Second priorities include vaccination of healthy children aged <24 months who have not received any doses of PCV7 and vaccination of healthy children aged <12 months who have not yet received 3 doses.

TABLE. Recommended 7-valent pneumococcal conjugate vaccination regimens among children aged <5 years, by history and condition

Age at examination (mos)	Vaccination history	Recommended regimen*
2–6	0 doses	3 doses, 2 mos apart; fourth dose at age 12–15 mos
	1 dose	2 doses, 2 mos apart; fourth dose at age 12–15 mos
	2 doses	1 dose, 2 mos after the most recent dose; fourth dose at age 12–15 mos
7–11	0 doses	2 doses, 2 mos apart; third dose at 12–15 mos
	1 or 2 doses before age 7 mos	1 dose at age 7–11 mos, with another dose at 12–15 mos (≥2 mos later)
12–23	0 doses	2 doses, ≥2 mos apart
	1 dose before age 12 mos	2 doses, ≥2 mos apart
	1 dose at ≥12 mos	1 dose, ≥2 mos after the most recent dose
	2 or 3 doses before age 12 mos	1 dose, ≥2 mos after the most recent dose
24–59		
Healthy children	Any incomplete schedule	Consider 1 dose, ≥2 mos after the most recent dose†
Children at high risk§	Any incomplete schedule of <3 doses	1 dose, ≥2 mos after the most recent dose and another dose ≥2 mos later
	Any incomplete schedule of 3 doses	1 dose, ≥2 mos after the most recent dose

* For children vaccinated at age <12 months, the minimum interval between doses is 4 weeks. Doses administered at ≥12 months should be ≥8 weeks apart.
† Providers should consider administering a single dose to unvaccinated, healthy children aged 24–59 months with priority given to children aged 24–35 months, black children, American Indian or Alaska Native children not otherwise identified as high risk, and children who attend group day care centers.
§ Children with sickle cell disease, asplenia, chronic heart or lung disease, diabetes, cerebrospinal fluid leak, cochlear implant, human immunodeficiency virus infection or another immunocompromising condition, and American Indian or Alaska Native children in areas with a demonstrated risk for invasive pneumococcal disease more than twice the national average (i.e., Alaska, Arizona, New Mexico, and Navajo populations in Colorado and Utah).

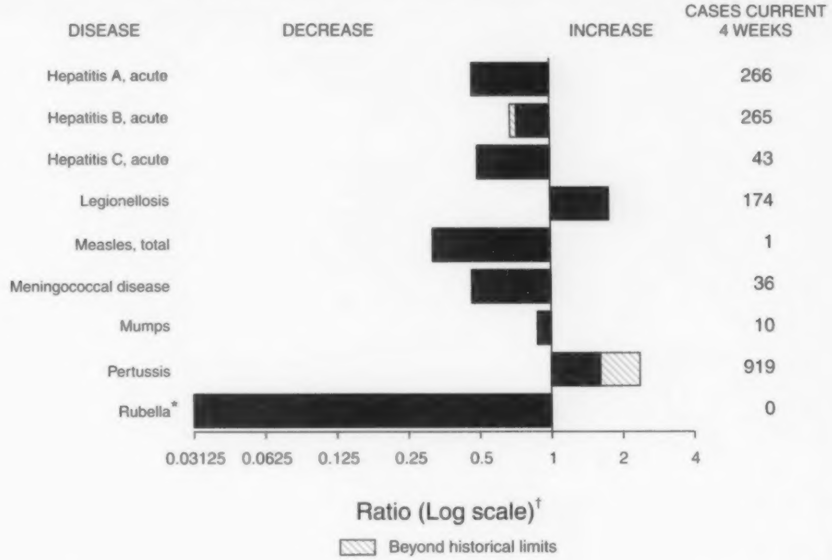
Because of the frequency of health-care provider visits by children during their first 18 months, catch-up vaccination might occur at regularly scheduled visits for most children who receive vaccines from their primary-care providers. Programs that provide vaccinations but do not see children routinely for other reasons should consider a notification process to contact undervaccinated children.

Providers with questions about obtaining Prevnar® should contact Wyeth's customer service department, telephone 800-666-7248. For public-purchased vaccine, including vaccines used in the Vaccines for Children Program, providers should contact their state/grantee immunization projects to obtain vaccine. These projects should contact their project officers at the National Immunization Program at CDC for information regarding vaccine supply.

References

1. CDC. Limited supply of pneumococcal conjugate vaccine: suspension of recommendation for fourth dose. MMWR 2004;53:108–9.
2. CDC. Updated recommendations on the use of pneumococcal conjugate vaccine: suspension of recommendation for third and fourth dose. MMWR 2004;53:177–8.
3. CDC. Updated recommendations for use of pneumococcal conjugate vaccine: reinstatement of the third dose. MMWR 2004;53:589–90.
4. CDC. Prevention of pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices. MMWR 2000;49(No. RR-9).
5. CDC. Pneumococcal vaccination for cochlear implant candidates and recipients: updated recommendations of the Advisory Committee on Immunization Practices. MMWR 2003;52:739–40.
6. CDC. Recommended childhood and adolescent immunization schedule—United States, July–December 2004. MMWR 2004;53:Q1–3.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 11, 2004, with historical data



* No Rubella cases were reported for the current 4-week period yielding a ratio for week 36 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending September 11, 2004 (36th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	91	103
Botulism:	-	-	HIV infection, pediatric†¶	113	144
foodborne	8	8	Measles, total	23**	49††
infant	49	47	Mumps	139	152
other (wound & unspecified)	7	17	Plague	1	1
Brucellosis†	75	66	Poliomyelitis, paralytic	-	-
Chancroid	27	41	Psittacosis†	5	9
Cholera	4	1	Q fever†	48	54
Cyclosporiasis†	184	58	Rabies, human	3	1
Diphtheria	-	-	Rubella	15	6
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	173	218	SARS-associated coronavirus disease† §§	-	8
human monocytic (HME)†	170	161	Smallpox† ¶¶	-	NA
human, other and unspecified	17	34	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ¶¶	4	NA
California serogroup viral† §	41	85	Vancomycin-resistant (VRSA)† ¶¶	1	NA
eastern equine† §	2	12	Streptococcal toxic-shock syndrome†	75	125
Powassan† §	-	-	Tetanus	9	14
St. Louis† §	4	33	Toxic-shock syndrome	91	87
western equine† §	-	-	Trichinosis	5	1
Hansen disease (leprosy)†	57	58	Tularemia†	55	53
Hantavirus pulmonary syndrome†	16	17	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.
** Of 23 cases reported, 10 were indigenous, and 13 were imported from another country.
†† Of 49 cases reported, 30 were indigenous, and 19 were imported from another country.
§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
¶¶ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile§	
	Cum. 2004¶	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	27,094	29,932	597,305	587,311	3,972	2,468	2,060	1,968	486	2,162
NEW ENGLAND	873	989	20,442	18,847	-	-	114	128	-	13
Maine	15	49	1,409	1,365	N	N	16	10	-	-
N.H.	30	24	1,146	1,060	-	-	21	15	-	1
Vt.	13	13	688	707	-	-	21	23	-	-
Mass.	289	408	9,200	7,480	-	-	38	59	-	6
R.I.	98	79	2,324	1,993	-	-	4	12	-	1
Conn.	428	416	5,675	6,242	N	N	14	9	-	5
MID. ATLANTIC	5,955	6,691	74,189	72,661	-	-	276	265	5	119
Upstate N.Y.	683	671	15,234	13,016	N	N	70	73	1	-
N.Y. City	3,288	3,395	22,492	23,856	-	-	54	76	2	32
N.J.	1,014	1,152	11,184	10,865	-	-	21	13	-	12
Pa.	970	1,473	25,279	24,924	N	N	131	103	2	75
E.N. CENTRAL	2,398	2,918	99,880	105,503	11	7	606	582	25	58
Ohio	487	554	22,577	28,799	N	N	171	70	2	28
Ind.	276	378	12,628	11,759	N	N	63	57	2	8
Ill.	1,126	1,341	27,351	32,651	-	-	69	61	14	12
Mich.	386	509	25,947	20,706	11	7	113	83	3	5
Wis.	123	136	11,377	11,588	-	-	190	311	4	5
W.N. CENTRAL	597	567	35,646	34,081	4	2	270	273	39	545
Minn.	149	110	6,746	7,440	N	N	89	82	8	34
Iowa	47	63	3,642	3,617	N	N	60	52	-	55
Mo.	263	268	13,883	12,304	3	1	44	23	9	21
N. Dak.	14	3	1,086	1,079	N	N	9	11	2	90
S. Dak.	7	8	1,629	1,725	-	-	23	26	5	133
Nebr.**	33	38	3,514	3,129	1	1	23	10	-	153
Kans.	84	77	5,146	4,787	N	N	22	69	15	59
S. ATLANTIC	8,434	8,476	119,592	110,858	-	3	355	232	33	101
Del.	108	173	1,954	2,072	N	N	-	3	-	6
Md.	991	989	13,034	11,068	-	3	14	13	4	31
D.C.	523	764	2,237	2,195	-	-	11	8	-	2
Va.	481	653	15,268	12,955	-	-	38	31	2	9
W. Va.	57	60	1,954	1,753	N	N	4	3	-	-
N.C.	427	851	20,104	18,063	N	N	54	23	2	10
S.C.**	509	544	14,176	9,413	-	-	14	5	-	2
Ga.	1,185	1,375	22,220	24,556	-	-	131	82	4	10
Fla.	4,153	3,067	28,645	28,783	N	N	89	64	21	31
E.S. CENTRAL	1,336	1,303	38,298	38,380	4	1	88	94	23	53
Ky.	160	111	3,891	5,627	N	N	28	20	-	6
Tenn.**	533	570	15,356	13,861	N	N	26	32	5	10
Ala.	316	310	8,460	10,080	-	-	15	34	9	18
Miss.	327	312	10,591	8,812	4	1	19	8	9	19
W.S. CENTRAL	3,181	3,086	75,151	73,340	2	-	53	67	63	471
Ark.	134	126	5,180	5,411	1	-	14	6	5	14
La.	655	415	15,796	14,356	1	-	-	2	30	64
Okla.	133	154	7,739	7,810	N	N	15	9	3	33
Tex.**	2,259	2,391	46,436	45,763	-	-	24	50	25	360
MOUNTAIN	973	1,141	33,152	33,751	2,564	1,646	125	85	203	802
Mont.	5	11	1,492	1,346	N	N	34	16	1	66
Idaho	15	18	1,946	1,750	N	N	18	18	-	-
Wyo.	15	5	752	683	2	1	3	3	2	89
Colo.	166	295	7,655	8,864	N	N	41	21	32	581
N. Mex.	140	88	4,212	5,155	11	5	7	6	18	61
Ariz.	385	484	11,146	9,537	2,483	1,607	17	4	130	3
Utah	54	47	2,349	2,569	24	6	3	11	3	-
Nev.	193	193	3,600	3,847	44	27	2	6	17	2
PACIFIC	3,347	4,761	100,955	99,890	1,387	809	173	242	95	-
Wash.	291	309	12,084	10,904	N	N	17	25	-	-
Oreg.	219	184	5,647	5,057	-	-	26	28	-	-
Calif.	2,727	4,184	78,729	77,627	1,387	809	129	189	95	-
Alaska	37	13	2,500	2,619	-	-	-	-	-	-
Hawaii	73	71	1,995	3,683	-	-	1	-	-	-
Guam	2	5	-	441	-	-	-	-	-	-
P.R.	403	787	1,699	1,667	N	N	N	N	-	-
V.I.	10	25	143	279	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.

** Contains data reported through National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,574	1,526	151	167	105	99	11,584	12,157	209,996	223,742
NEW ENGLAND	107	102	36	32	20	10	1,027	956	4,790	4,833
Maine	6	8	-	-	-	-	87	113	156	138
N.H.	14	13	5	3	-	-	26	27	86	79
Vt.	10	13	-	-	-	-	119	76	58	57
Mass.	48	41	9	8	20	10	463	481	2,183	1,902
R.I.	6	1	1	-	-	-	68	62	596	658
Conn.	23	26	21	21	-	-	264	177	1,711	1,999
MID. ATLANTIC	167	172	21	18	21	20	2,459	2,465	23,741	27,928
Upstate N.Y.	77	58	11	9	10	7	854	645	4,977	5,109
N.Y. City	28	6	-	-	-	-	665	807	7,173	9,243
N.J.	27	23	3	2	4	-	257	354	4,259	5,694
Pa.	35	85	7	7	7	13	683	659	7,332	7,882
E.N. CENTRAL	294	353	25	26	14	14	1,615	2,128	41,122	46,855
Ohio	66	66	9	14	11	14	551	591	11,325	15,061
Ind.	40	57	-	-	-	-	-	-	4,552	4,496
Ill.	48	74	1	2	-	-	335	641	11,968	14,551
Mich.	60	52	4	-	3	-	466	485	10,357	6,888
Wis.	80	104	11	10	-	-	263	411	2,920	3,859
W.N. CENTRAL	361	247	24	30	15	16	1,329	1,239	11,298	11,847
Minn.	83	81	12	14	1	1	506	454	2,139	2,019
Iowa	99	53	-	-	-	-	199	172	649	898
Mo.	59	55	12	9	6	1	322	338	5,841	5,918
N. Dak.	12	8	-	3	6	6	18	28	74	54
S. Dak.	27	14	-	3	-	-	42	39	174	149
Nebr.	55	17	-	1	-	-	96	90	695	1,025
Kans.	26	19	-	-	2	8	146	118	1,726	1,784
S. ATLANTIC	116	103	26	35	26	25	1,899	1,757	54,016	55,267
Del.	2	5	N	N	N	N	35	28	616	811
Md.	20	10	3	2	1	1	82	73	5,601	5,289
D.C.	1	1	-	-	-	-	44	35	1,678	1,697
Va.	25	28	9	9	-	-	343	231	6,150	6,058
W. Va.	2	3	-	-	-	-	25	25	638	597
N.C.	-	-	-	-	16	20	N	N	10,643	10,443
S.C.	6	-	-	-	-	-	39	83	6,937	5,548
Ga.	20	21	10	5	-	-	577	574	9,617	12,164
Fla.	40	35	4	19	9	4	754	708	12,136	12,660
E.S. CENTRAL	67	55	1	1	8	5	244	241	16,587	18,927
Ky.	19	18	1	1	5	5	N	N	1,700	2,467
Tenn.	30	23	-	-	3	-	128	111	5,664	5,674
Ala.	11	11	-	-	-	-	116	130	5,156	6,367
Miss.	7	3	-	-	-	-	-	-	4,067	4,419
W.S. CENTRAL	55	62	2	4	1	4	189	193	28,647	30,311
Ark.	10	7	1	-	-	-	80	103	2,530	2,895
La.	2	3	-	-	-	-	19	9	7,296	8,135
Okla.	14	19	-	-	-	-	87	81	3,297	3,127
Tex.	29	33	1	4	1	4	3	-	15,524	16,154
MOUNTAIN	161	184	14	19	-	5	1,036	1,011	7,031	7,183
Mont.	12	12	-	-	-	-	43	64	44	71
Idaho	37	42	7	14	-	-	123	128	57	54
Wyo.	6	2	1	-	-	-	16	15	42	32
Colo.	40	46	2	3	-	5	367	286	1,739	1,974
N. Mex.	8	6	1	2	-	-	51	33	574	841
Ariz.	15	23	N	N	N	N	134	178	2,623	2,635
Utah	29	36	2	-	-	-	223	221	354	248
Nev.	14	17	1	-	-	-	79	86	1,598	1,328
PACIFIC	246	248	2	2	-	-	1,786	2,167	22,764	20,591
Wash.	85	56	-	1	-	-	224	208	1,824	1,877
Oreg.	44	68	2	1	-	-	298	285	781	670
Calif.	108	118	-	-	-	-	1,158	1,557	19,264	16,882
Alaska	1	2	-	-	-	-	52	56	393	367
Hawaii	8	4	-	-	-	-	54	61	502	795
Guam	N	N	-	-	-	-	-	2	-	44
P.R.	-	1	-	-	-	-	41	183	135	186
V.I.	-	-	-	-	-	-	-	-	49	61
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,338	1,329	10	19	65	86	137	144	3,833	4,398
NEW ENGLAND	111	93	1	2	5	5	3	3	707	217
Maine	10	2	-	-	-	-	-	1	10	8
N.H.	14	10	-	1	2	-	-	-	16	12
Vt.	5	7	-	-	-	-	1	-	8	6
Mass.	48	45	1	1	-	5	2	1	599	120
R.I.	3	4	-	-	-	-	-	1	17	11
Conn.	31	25	-	-	3	-	-	-	57	60
MID. ATLANTIC	274	284	-	1	4	3	31	34	439	916
Upstate N.Y.	91	101	-	1	4	3	5	8	57	81
N.Y. City	58	48	-	-	-	-	11	9	174	334
N.J.	56	55	-	-	-	-	3	7	88	143
Pa.	69	80	-	-	-	-	12	10	120	358
E.N. CENTRAL	212	219	-	3	6	3	33	41	368	430
Ohio	79	55	-	-	2	-	14	10	37	76
Ind.	38	36	-	-	4	-	1	4	69	44
Ill.	49	81	-	-	-	-	11	20	129	131
Mich.	15	17	-	3	-	3	5	1	110	141
Wis.	31	30	-	-	-	-	2	6	23	38
W.N. CENTRAL	83	86	2	-	3	6	10	11	137	125
Minn.	34	34	1	-	3	6	-	2	28	33
Iowa	1	-	1	-	-	-	-	-	36	19
Mo.	30	35	-	-	-	-	6	9	43	42
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	3	-
Nebr.	7	1	-	-	-	-	1	-	8	10
Kans.	8	13	-	-	-	-	3	-	18	21
S. ATLANTIC	336	287	-	1	17	10	26	16	760	966
Del.	-	-	-	-	-	-	-	-	5	5
Md.	47	65	-	-	4	5	-	-	87	103
D.C.	-	1	-	-	-	-	-	-	5	27
Va.	28	39	-	-	-	-	1	5	89	58
W. Va.	11	13	-	-	-	-	3	-	4	12
N.C.	44	31	-	-	5	2	1	1	71	58
S.C.	4	5	-	-	-	-	-	1	23	26
Ga.	119	51	-	-	-	-	20	6	274	399
Fla.	83	82	-	1	8	3	1	3	202	278
E.S. CENTRAL	56	56	1	1	-	2	7	5	124	124
Ky.	5	5	-	-	-	1	-	-	27	23
Tenn.	36	31	-	-	-	1	5	3	71	73
Ala.	12	18	1	1	-	-	2	2	6	14
Miss.	3	2	-	-	-	-	-	-	20	14
W.S. CENTRAL	53	63	1	2	6	10	1	4	255	445
Ark.	2	5	-	-	-	1	-	-	53	23
La.	8	19	-	-	-	2	1	4	15	36
Okla.	42	36	-	-	6	7	-	-	18	9
Tex.	1	3	1	2	-	-	-	-	169	377
MOUNTAIN	149	128	3	6	17	22	20	13	338	338
Mont.	-	-	-	-	-	-	-	-	5	7
Idaho	5	3	-	-	-	-	2	1	15	11
Wyo.	-	1	-	-	-	-	-	-	4	1
Colo.	36	25	-	-	-	-	4	5	41	52
N. Mex.	29	15	-	-	5	4	5	1	15	16
Ariz.	56	64	-	6	8	9	4	4	207	190
Utah	12	10	2	-	1	5	4	2	40	24
Nev.	11	10	1	-	3	4	1	-	11	37
PACIFIC	64	113	2	3	7	25	6	17	705	837
Wash.	3	8	2	-	-	6	1	1	40	42
Oreg.	32	29	-	-	-	-	2	2	49	44
Calif.	17	49	-	3	7	19	1	9	593	735
Alaska	4	18	-	-	-	-	1	5	5	8
Hawaii	8	9	-	-	-	-	1	-	18	8
Guam	-	-	-	-	-	-	-	-	-	2
P.R.	-	-	-	-	-	-	-	-	15	57
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

	Hepatitis (viral, acute), by type									
	B		C		Legionellosis		Listeriosis		Lyme disease	
Reporting area	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	4,388	4,778	736	730	1,191	1,381	419	455	11,195	14,403
NEW ENGLAND	238	243	7	5	35	74	22	33	1,358	2,782
Maine	1	1	-	-	-	2	5	5	53	102
N.H.	27	11	-	-	4	7	2	3	154	96
Vt.	3	3	3	5	3	5	1	-	35	30
Mass.	127	157	3	-	5	41	3	14	352	1,303
R.I.	3	8	-	-	8	3	1	-	148	344
Conn.	77	63	1	-	15	16	10	11	616	907
MID. ATLANTIC	847	538	88	85	323	391	96	94	7,656	9,507
Upstate N.Y.	59	59	9	10	60	93	28	21	2,454	2,796
N.Y. City	75	151	-	-	26	44	12	15	-	175
N.J.	507	133	-	-	65	58	18	20	2,180	2,397
Pa.	206	195	79	75	172	196	38	38	3,022	4,139
E.N. CENTRAL	382	328	79	110	330	284	75	65	779	766
Ohio	90	91	5	7	159	156	31	18	65	44
Ind.	30	23	7	6	51	19	16	5	70	17
Ill.	50	38	11	16	18	34	5	18	-	62
Mich.	189	144	56	76	95	60	21	16	18	3
Wis.	23	32	-	5	7	15	2	8	626	640
W.N. CENTRAL	264	222	177	151	32	49	8	12	334	256
Minn.	39	28	15	7	6	3	3	3	246	181
Iowa	13	8	-	1	4	9	1	-	28	36
Mo.	168	149	162	141	14	24	2	5	50	34
N. Dak.	4	2	-	-	2	1	-	-	-	-
S. Dak.	-	2	-	-	3	1	-	-	-	-
Nebr.	27	19	-	2	1	3	2	3	6	2
Kans.	13	14	-	-	2	8	-	1	4	3
S. ATLANTIC	1,358	1,349	128	112	258	360	70	88	904	887
Del.	26	6	-	-	9	19	N	N	107	162
Md.	110	88	13	6	55	86	10	14	531	547
D.C.	15	7	1	-	8	10	-	-	4	5
Va.	170	122	15	6	32	68	13	9	99	60
W. Va.	27	20	19	1	5	12	2	5	15	13
N.C.	129	110	10	10	25	26	15	14	87	62
S.C.	60	107	7	24	3	6	1	2	8	1
Ga.	482	454	15	9	35	28	12	22	9	10
Fla.	339	435	48	56	86	105	17	22	44	27
E.S. CENTRAL	326	311	76	54	62	82	20	20	38	47
Ky.	42	50	23	10	24	32	4	5	13	10
Tenn.	160	128	29	13	26	28	10	4	15	13
Ala.	53	68	4	5	11	18	4	9	2	6
Miss.	71	65	20	26	1	4	2	2	8	18
W.S. CENTRAL	172	764	87	131	38	48	26	39	31	80
Ark.	55	59	2	3	-	2	2	1	8	-
La.	34	92	44	85	3	1	2	2	2	6
Okla.	34	44	3	2	3	5	-	1	-	-
Tex.	49	569	38	41	32	40	22	35	21	74
MOUNTAIN	343	424	39	34	62	44	18	25	25	11
Mont.	2	13	2	1	1	2	-	1	-	-
Idaho	10	7	-	1	7	3	1	2	5	3
Wyo.	7	27	2	-	5	2	-	-	2	1
Colo.	39	56	8	8	15	8	8	9	3	-
N. Mex.	11	30	7	-	2	2	-	2	-	1
Ariz.	189	194	5	6	11	9	-	7	6	1
Utah	33	38	3	-	17	13	2	2	9	2
Nev.	52	59	12	18	4	5	7	2	-	3
PACIFIC	458	599	55	48	51	49	84	79	70	67
Wash.	38	50	15	15	9	7	8	4	9	1
Oreg.	77	82	13	9	N	N	5	4	25	11
Calif.	326	445	23	22	42	42	68	67	34	52
Alaska	14	4	-	-	-	-	-	-	2	3
Hawaii	3	18	4	2	-	-	3	4	N	N
Guam	-	5	-	3	-	-	-	-	-	-
P.R.	39	92	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	859	862	942	1,213	9,003	5,514	3,815	4,941	912	538
NEW ENGLAND	52	41	49	53	972	720	429	407	16	7
Maine	5	2	8	5	2	12	32	43	-	-
N.H.	4	5	4	3	42	63	19	16	-	-
Vt.	3	1	2	1	60	53	17	27	-	-
Mass.	25	18	28	33	840	544	183	152	14	7
R.I.	2	1	1	2	16	12	27	47	1	-
Conn.	13	14	6	9	12	36	151	122	1	-
MID. ATLANTIC	198	216	119	145	1,866	591	367	646	54	32
Upstate N.Y.	30	36	28	33	1,321	260	333	281	1	-
N.Y. City	81	113	21	33	92	77	5	6	12	10
N.J.	47	43	26	19	158	95	-	62	17	15
Pa.	40	24	44	60	295	159	29	297	24	7
E.N. CENTRAL	78	80	135	192	2,065	536	110	117	45	13
Ohio	24	14	52	46	388	168	53	41	15	6
Ind.	11	2	20	36	78	43	7	14	25	1
Ill.	16	36	12	50	316	54	36	18	1	3
Mich.	17	19	41	35	143	80	14	36	4	3
Wis.	10	9	10	25	1,140	191	-	8	-	-
W.N. CENTRAL	47	37	69	88	1,148	248	362	503	86	51
Minn.	18	20	18	20	156	78	59	24	-	1
Iowa	2	4	12	17	65	70	81	81	-	2
Mo.	15	3	20	35	213	58	31	18	69	41
N. Dak.	3	1	2	1	635	4	48	46	-	-
S. Dak.	1	2	2	1	18	3	10	110	4	4
Nebr.	2	-	4	6	9	6	53	88	11	2
Kans.	6	7	11	8	52	29	80	136	2	1
S. ATLANTIC	231	222	166	220	429	436	1,385	1,929	400	292
Del.	4	2	2	8	7	7	9	26	-	1
Md.	47	50	8	24	81	62	157	261	55	75
D.C.	11	8	4	4	3	-	-	-	-	-
Va.	33	26	12	19	107	77	348	379	17	20
W. Va.	-	4	5	4	13	6	50	64	4	5
N.C.	14	18	26	30	62	87	440	575	269	120
S.C.	9	3	11	20	40	90	110	167	13	13
Ga.	45	52	18	24	30	25	265	269	25	51
Fla.	68	59	80	87	86	82	6	188	17	7
E.S. CENTRAL	27	21	44	62	210	118	100	151	133	85
Ky.	4	5	8	14	50	37	18	29	1	1
Tenn.	7	4	13	15	127	56	31	92	75	44
Ala.	11	7	11	17	22	16	42	29	28	16
Miss.	5	5	12	16	11	9	9	1	29	24
W.S. CENTRAL	81	97	82	137	422	445	798	892	154	50
Ark.	7	4	14	12	49	38	38	25	80	-
La.	2	4	23	34	7	8	-	2	3	-
Okla.	7	4	7	13	17	52	84	153	70	39
Tex.	65	85	38	78	349	347	676	712	1	11
MOUNTAIN	35	27	47	64	886	702	138	131	19	7
Mont.	-	-	3	3	33	4	20	19	3	1
Idaho	1	1	6	6	25	61	3	12	3	2
Wyo.	-	1	2	2	14	123	4	4	2	2
Colo.	12	12	12	18	438	243	34	26	1	2
N. Mex.	2	1	6	8	96	51	3	5	2	-
Ariz.	10	7	11	21	150	116	66	52	2	-
Utah	6	4	4	-	118	78	5	9	6	-
Nev.	4	1	3	6	12	26	3	4	-	-
PACIFIC	110	121	231	252	1,005	1,718	126	165	5	1
Wash.	12	19	23	25	452	459	-	-	-	-
Oreg.	14	9	46	38	297	357	5	6	3	-
Calif.	82	88	156	175	236	892	113	151	2	1
Alaska	-	-	2	4	8	1	8	8	-	-
Hawaii	2	5	4	10	12	9	-	-	-	-
Guam	-	1	-	-	-	1	-	-	-	-
P.R.	-	1	5	8	5	2	40	51	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) **Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)***

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive: Drug resistant, all ages		*Streptococcus pneumoniae*, invasive: Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	26,291	27,917	7,742	15,991	3,545	4,381	1,581	1,476	472	505
NEW ENGLAND	1,436	1,489	196	221	149	385	22	74	53	6
Maine	64	95	2	6	7	23	2	-	3	-
N.H.	103	102	6	5	15	25	-	-	N	N
Vt.	38	50	2	6	8	17	7	6	1	3
Mass.	837	884	127	155	102	170	N	N	42	N
R.I.	75	81	13	9	17	11	13	10	7	3
Conn.	319	277	46	40	-	139	-	58	U	U
MID. ATLANTIC	3,764	3,283	810	1,737	568	762	103	96	81	75
Upstate N.Y.	820	697	345	274	188	288	43	53	55	55
N.Y. City	802	897	229	289	73	109	U	U	U	U
N.J.	607	579	161	291	136	147	-	-	6	2
Pa.	1,535	1,110	75	883	171	218	60	43	20	18
E.N. CENTRAL	3,581	3,971	676	1,369	690	1,057	356	329	115	218
Ohio	932	980	123	243	181	250	249	216	60	77
Ind.	416	392	137	110	80	103	107	113	25	21
Ill.	1,051	1,383	247	728	152	267	-	-	-	81
Mich.	605	559	84	187	240	305	N	N	N	N
Wis.	577	657	85	101	37	132	N	N	30	39
W.N. CENTRAL	1,684	1,639	310	524	233	267	13	11	69	57
Minn.	408	356	44	67	120	130	-	-	49	40
Iowa	344	258	57	45	N	N	N	N	N	N
Mo.	444	621	120	276	49	59	8	7	8	2
N. Dak.	30	27	3	6	10	13	-	3	2	4
S. Dak.	75	71	9	11	12	19	5	1	-	-
Nebr.	114	104	22	67	11	22	-	-	5	5
Kans.	269	202	55	52	31	24	N	N	5	6
S. ATLANTIC	7,100	6,556	1,990	4,888	769	730	843	794	36	15
Del.	70	68	6	153	3	6	4	1	N	N
Md.	600	545	104	462	133	178	-	14	25	-
D.C.	40	28	29	53	6	6	5	-	3	5
Va.	813	690	109	294	60	88	N	N	N	N
W. Va.	162	80	4	-	19	31	87	57	8	10
N.C.	913	790	225	673	95	86	N	N	U	U
S.C.	622	422	266	323	37	36	65	114	N	N
Ga.	1,311	1,257	506	910	247	143	250	170	N	N
Fla.	2,569	2,676	741	2,020	169	156	432	438	N	N
E.S. CENTRAL	1,700	1,877	557	654	173	152	103	105	1	-
Ky.	241	287	53	72	51	39	22	14	N	N
Tenn.	441	517	277	231	122	113	80	91	N	N
Ala.	459	456	186	211	-	-	-	-	N	N
Miss.	559	617	41	140	-	-	1	-	1	-
W.S. CENTRAL	1,905	4,179	1,632	4,104	199	206	36	59	82	80
Ark.	350	480	50	80	16	6	6	19	7	5
La.	274	587	170	324	2	1	30	40	12	16
Okla.	270	292	322	592	48	65	N	N	32	40
Tex.	1,011	2,820	1,090	3,108	133	134	N	N	31	19
MOUNTAIN	1,655	1,456	540	738	386	363	27	4	35	54
Mont.	130	71	4	2	-	1	-	-	-	-
Idaho	122	125	9	24	8	18	N	N	N	N
Wyo.	42	67	3	5	6	2	8	3	-	-
Colo.	416	343	115	160	103	101	-	-	32	42
N. Mex.	171	168	76	149	65	89	5	-	-	8
Ariz.	504	416	275	321	168	127	N	N	N	N
Utah	159	147	30	35	34	24	12	1	3	4
Nev.	111	119	28	42	2	1	2	-	-	-
PACIFIC	3,466	3,467	1,031	1,756	378	459	78	4	-	-
Wash.	356	379	77	120	38	41	-	-	N	N
Oreg.	290	291	51	180	N	N	N	N	N	N
Calif.	2,534	2,600	862	1,416	270	329	N	N	N	N
Alaska	41	53	5	7	-	-	-	-	N	N
Hawaii	245	144	36	33	70	89	78	4	-	-
Guam	-	35	-	28	-	-	-	-	-	-
P.R.	143	456	4	19	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending September 11, 2004, and September 6, 2003 (36th Week)*

Reporting area	Syphilis: Primary & secondary Cum. 2004	Syphilis: Primary & secondary Cum. 2003	Syphilis: Congenital Cum. 2004	Syphilis: Congenital Cum. 2003	Tuberculosis Cum. 2004	Tuberculosis Cum. 2003	Typhoid fever Cum. 2004	Typhoid fever Cum. 2003	Varicella (Chickenpox) Cum. 2004	Varicella (Chickenpox) Cum. 2003
UNITED STATES	5,012	4,808	234	307	6,855	8,508	185	251	12,908	11,087
NEW ENGLAND	137	145	4	-	233	280	15	23	591	2,240
Maine	2	6	-	-	-	18	-	-	180	642
N.H.	3	15	3	-	9	11	-	2	-	-
Vt.	-	-	-	-	-	7	-	-	411	496
Mass.	89	92	-	-	155	136	12	13	-	123
R.I.	18	15	-	-	19	39	1	2	-	3
Conn.	25	17	1	-	50	69	2	6	-	976
MID. ATLANTIC	682	580	36	46	1,394	1,499	40	49	66	24
Upstate N.Y.	69	28	3	7	180	191	5	8	-	-
N.Y. City	413	323	11	25	705	784	11	26	-	-
N.J.	110	116	21	14	285	291	12	13	-	-
Pa.	90	113	1	-	224	233	12	2	66	24
E.N. CENTRAL	572	650	42	49	796	795	14	29	4,004	3,844
Ohio	154	147	1	2	131	142	4	2	1,035	944
Ind.	45	34	9	9	87	91	-	4	-	-
Ill.	220	266	8	18	361	374	-	15	-	-
Mich.	132	188	24	20	155	143	8	8	2,577	2,296
Wis.	21	15	-	-	62	45	2	-	392	604
W.N. CENTRAL	113	109	3	4	298	313	8	5	123	41
Minn.	15	33	1	-	113	127	4	2	-	-
Iowa	5	8	-	-	23	20	-	1	N	N
Mo.	68	39	1	4	72	77	2	1	5	-
N. Dak.	-	2	-	-	3	-	-	-	75	41
S. Dak.	-	1	-	-	8	16	-	-	43	-
Nebr.	5	5	-	-	24	13	2	1	-	-
Kans.	20	21	1	-	55	60	-	-	-	-
S. ATLANTIC	1,305	1,275	33	61	1,375	1,624	30	37	1,650	1,590
Del.	6	4	1	-	-	-	-	-	4	21
Md.	251	210	4	10	183	159	9	8	-	-
D.C.	58	36	1	-	60	-	1	-	19	22
Va.	70	63	2	1	147	176	3	12	412	441
W. Va.	2	2	-	-	14	12	-	-	970	931
N.C.	133	112	8	16	197	194	3	6	N	N
S.C.	89	78	6	4	131	110	-	-	245	175
Ga.	201	343	1	13	11	362	6	5	-	-
Fla.	495	427	10	17	632	611	8	6	-	-
E.S. CENTRAL	274	220	16	11	391	454	6	5	-	-
Ky.	30	29	1	1	72	82	2	-	-	-
Tenn.	89	92	7	2	144	158	4	2	-	-
Ala.	126	78	6	6	142	139	-	3	-	-
Miss.	29	21	2	2	33	75	-	-	-	-
W.S. CENTRAL	802	605	37	55	500	1,302	12	23	4,760	2,956
Ark.	32	38	-	2	83	65	-	-	-	-
La.	174	88	-	1	-	-	-	-	42	10
Okla.	19	43	2	1	106	100	1	-	-	-
Tex.	577	436	35	51	311	1,137	11	23	4,718	2,946
MOUNTAIN	251	222	40	28	323	293	5	4	1,714	392
Mont.	-	-	-	-	4	5	-	-	-	-
Idaho	15	4	2	2	4	5	-	-	-	-
Wyo.	1	-	-	-	2	3	-	-	26	39
Colo.	25	25	-	3	66	66	1	3	1,305	-
N. Mex.	46	40	1	5	16	35	-	-	68	1
Ariz.	141	138	37	18	149	129	2	1	-	-
Utah	4	5	-	-	29	28	1	-	315	352
Nev.	19	10	-	-	53	22	1	-	-	-
PACIFIC	876	1,002	23	53	1,545	1,948	55	76	-	-
Wash.	83	53	-	-	152	174	4	3	-	-
Oreg.	19	30	-	-	58	78	2	3	-	-
Calif.	770	912	23	52	1,235	1,578	43	69	-	-
Alaska	-	1	-	-	27	43	-	-	-	-
Hawaii	4	6	-	1	73	75	6	1	-	-
Guam	-	1	-	-	-	38	-	-	-	94
P.R.	77	141	5	12	60	75	-	-	194	413
V.I.	4	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending September 11, 2004 (36th Week)

Reporting Area	All causes, by age (years) All Ages	≥65	45–64	25–44	1–24	<1	P&I† Total
NEW ENGLAND	506	325	117	40	14	10	46
Boston, Mass.	145	78	39	17	7	4	21
Bridgeport, Conn.	22	14	6	2	-	-	1
Cambridge, Mass.	8	6	1	1	-	-	2
Fall River, Mass.	21	19	1	-	1	-	4
Hartford, Conn.	41	26	9	4	1	1	6
Lowell, Mass.	14	11	2	1	-	-	2
Lynn, Mass.	9	4	4	1	-	-	-
New Bedford, Mass.	19	13	5	1	-	-	1
New Haven, Conn.	38	25	8	4	-	1	4
Providence, R.I.	64	42	15	4	3	-	-
Somerville, Mass.	4	3	-	1	-	-	1
Springfield, Mass.	43	31	10	1	-	1	-
Waterbury, Conn.	27	20	3	2	-	2	2
Worcester, Mass.	51	33	14	1	2	1	2
MID. ATLANTIC	1,939	1,312	406	150	36	33	110
Albany, N.Y.	41	27	9	2	2	1	4
Allentown, Pa.	26	21	4	-	1	-	2
Buffalo, N.Y.	105	70	25	6	2	2	9
Camden, N.J.	36	20	6	10	-	-	-
Elizabeth, N.J.	15	9	3	3	-	-	1
Erie, Pa.	42	35	5	1	1	-	-
Jersey City, N.J.	28	19	5	4	-	-	-
New York City, N.Y.	998	684	203	78	16	15	52
Newark, N.J.	51	21	16	12	1	1	2
Paterson, N.J.	14	7	3	4	-	-	-
Philadelphia, Pa.	262	154	72	17	8	11	13
Pittsburgh, Pa.§	25	17	5	-	1	2	1
Reading, Pa.	17	13	3	-	-	1	-
Rochester, N.Y.	116	91	18	4	3	-	14
Schenectady, N.Y.	17	12	4	1	-	-	-
Scranton, Pa.	25	19	4	2	-	-	2
Syracuse, N.Y.	69	56	11	2	-	-	5
Trenton, N.J.	18	12	3	2	1	-	-
Utica, N.Y.	18	15	2	1	-	-	5
Yonkers, N.Y.	16	10	5	1	-	-	-
E.N. CENTRAL	1,823	1,182	413	128	48	50	105
Akron, Ohio	46	30	8	4	2	2	5
Canton, Ohio	32	26	4	2	-	-	3
Chicago, Ill.	302	172	80	27	13	8	14
Cincinnati, Ohio	76	42	17	6	2	9	6
Cleveland, Ohio	190	133	39	7	1	10	5
Columbus, Ohio	154	103	37	5	5	4	16
Dayton, Ohio	110	74	24	10	2	-	7
Detroit, Mich.	148	73	46	22	6	1	13
Evansville, Ind.	41	29	8	2	-	2	3
Fort Wayne, Ind.	54	39	11	4	-	-	3
Gary, Ind.	24	16	4	4	-	-	2
Grand Rapids, Mich.	41	27	10	3	1	-	3
Indianapolis, Ind.	229	160	42	14	7	6	7
Lansing, Mich.	25	14	9	-	1	1	-
Milwaukee, Wis.	95	67	21	2	-	5	8
Peoria, Ill.	47	27	14	1	5	-	2
Rockford, Ill.	48	33	8	5	1	1	-
South Bend, Ind.	40	32	5	2	1	-	3
Toledo, Ohio	72	50	19	2	-	1	2
Youngstown, Ohio	49	35	7	6	1	-	3
W.N. CENTRAL	544	358	113	39	10	22	37
Des Moines, Iowa	64	41	19	-	1	3	2
Duluth, Minn.	27	24	3	-	-	-	-
Kansas City, Kans.	27	16	3	5	1	2	4
Kansas City, Mo.	55	38	8	6	1	2	5
Lincoln, Nebr.	31	23	4	3	-	1	2
Minneapolis, Minn.	47	24	13	3	1	6	5
Omaha, Nebr.	68	45	18	4	-	1	6
St. Louis, Mo.	72	36	19	9	3	3	2
St. Paul, Minn.	58	45	5	4	1	3	5
Wichita, Kans.	95	66	21	5	2	1	6
S. ATLANTIC	926	547	245	79	30	25	46
Atlanta, Ga.	110	61	33	9	3	4	1
Baltimore, Md.	104	49	34	15	2	4	11
Charlotte, N.C.	99	52	29	6	4	8	6
Jacksonville, Fla.	108	66	26	7	9	-	6
Miami, Fla.	72	39	21	9	2	1	1
Norfolk, Va.	37	22	10	2	-	3	2
Richmond, Va.	49	28	13	6	2	-	2
Savannah, Ga.	56	41	9	2	3	1	5
St. Petersburg, Fla.	39	27	5	4	1	2	4
Tampa, Fla.	127	87	28	10	-	2	5
Washington, D.C.	108	61	36	7	4	-	2
Wilmington, Del.	17	14	1	2	-	-	1
E.S. CENTRAL	691	439	154	59	22	17	42
Birmingham, Ala.	154	96	32	17	7	2	10
Chattanooga, Tenn.	54	39	8	2	2	3	2
Knoxville, Tenn.	72	51	12	8	-	1	2
Lexington, Ky.	93	58	24	6	3	2	6
Memphis, Tenn.	122	77	29	7	2	7	10
Mobile, Ala.	63	42	14	5	1	1	3
Montgomery, Ala.	14	8	5	1	-	-	3
Nashville, Tenn.	119	68	30	13	7	1	6
W.S. CENTRAL	1,219	749	292	116	41	21	56
Austin, Tex.	73	48	18	5	1	1	5
Baton Rouge, La.	U	U	U	U	U	U	U
Corpus Christi, Tex.	42	25	13	3	1	-	-
Dallas, Tex.	169	81	44	27	13	4	6
El Paso, Tex.	72	45	15	6	4	2	2
Ft. Worth, Tex.	87	49	29	7	2	-	2
Houston, Tex.	313	179	77	35	15	7	23
Little Rock, Ark.	66	43	20	1	-	2	1
New Orleans, La.	58	36	13	8	1	-	-
San Antonio, Tex.	178	128	34	13	2	1	10
Shreveport, La.	54	38	10	1	2	3	2
Tulsa, Okla.	107	77	19	10	-	1	5
MOUNTAIN	748	499	156	58	23	10	41
Albuquerque, N.M.	97	63	17	11	5	1	3
Boise, Idaho	34	24	9	-	1	-	2
Colo. Springs, Colo.	41	28	6	4	1	2	2
Denver, Colo.	99	66	20	7	3	2	8
Las Vegas, Nev.	250	166	65	16	2	1	10
Ogden, Utah	21	18	2	1	-	-	5
Phoenix, Ariz.	70	43	12	11	2	1	4
Pueblo, Colo.	37	31	5	1	-	-	1
Salt Lake City, Utah	99	60	20	7	9	3	6
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	1,353	925	280	94	29	25	95
Berkeley, Calif.	18	11	3	2	-	2	-
Fresno, Calif.	139	97	26	11	4	1	6
Glendale, Calif.	9	8	-	1	-	-	-
Honolulu, Hawaii	64	47	12	4	1	-	2
Long Beach, Calif.	83	62	15	5	-	1	13
Los Angeles, Calif.	285	185	64	21	7	8	31
Pasadena, Calif.	24	17	5	2	-	-	2
Portland, Oreg.	110	81	15	7	4	3	6
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	140	89	33	8	3	7	6
San Francisco, Calif.	138	88	34	13	1	2	10
San Jose, Calif.	132	93	29	7	3	-	9
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	87	60	18	5	4	-	4
Spokane, Wash.	41	28	10	2	1	-	2
Tacoma, Wash.	83	59	16	6	1	1	4
TOTAL	9,749¶	6,336	2,176	763	253	213	578

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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